



3. COUNTY PROFILE

The planning area for this HMP is the entirety of Cape May County. This chapter presents general information about the land, people, and assets of Cape May County. This information provides a baseline for understanding the economic, structural, and population assets at risk from the hazards addressed in this HMP.

3.1 LOCATION

Cape May County is the southernmost county in New Jersey (see Figure 3-1). Its boundaries are generally defined by the Atlantic Ocean to the east, Delaware Bay to the south and west, and the Tuckahoe River to the north. The County's western boundary is partially formed by West Creek, a marshy tributary of the Delaware Bay. Cumberland County is located to the west, and Atlantic County is to the north. The County is largely rural and natural in character though it is relatively near to major urban areas of the region: 100 miles to Baltimore, 121 miles to Washington, DC, 59 miles to Philadelphia, and 116 miles to New York City. Cape May County is a popular tourist destination with a significant resort industry.

3.2 HISTORY

Cape May County was first discovered and settled by Dutch explorers in the early 17th century. The region eventually grew as its inhabitants further established its whaling and agricultural industries. Cape May County was formally created on November 12, 1692, by an Act of the General Assembly of the Province of West New Jersey. By the turn of the 20th century, the County had changed into one of the most popular seaside summer resort destinations. Today, the County continues to be successful in the tourist industry (Cape May County 2015).

3.3 JURISDICTIONS WITHIN THE COUNTY

Cape May County consists of 16 municipalities: five cities, four townships, and seven boroughs, as listed in Table 3-1 and shown on Figure 3-1. In addition to the municipalities, special purpose districts operate within the boundaries of the County, including the Cape May County Municipal Utilities Authority, which is a participating jurisdiction in this plan update.

Table 3-1. Cape May County Municipalities

City	Township
City of Cape May City of North Wildwood City of Ocean City of Sea Isle City of Wildwood	Township of Dennis Township of Lower Township of Middle Township of Upper
Borough	
Borough of Avalon Borough of Cape May Point Borough of Stone Harbor Borough of West Cape May	Borough of West Wildwood Borough of Wildwood Crest Borough of Woodbine



Figure 3-1. Cape May County Hazard Mitigation Plan Area



3.4 PHYSICAL SETTING

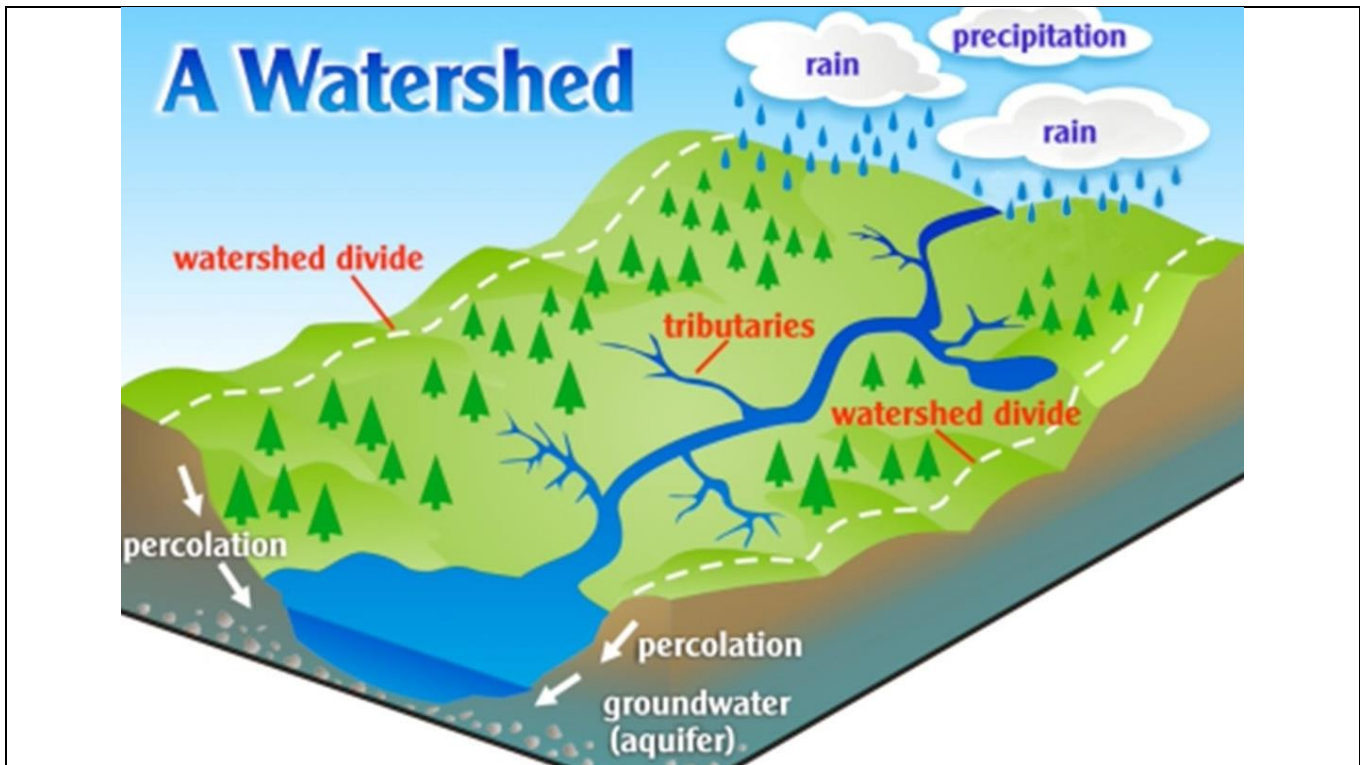
3.4.1 Surface Waters

Streams in Cape May County are predominately tidal in their lower reaches, with headwaters in freshwater swamps and discharging to saltwater marshes near the shore. Extensive tidal marshes border the lower reaches of the Tuckahoe River in the north and Dennis Creek in the west-central part of the County. There are over 1,574 miles of streams, along with approximately 24,150 acres of ponds, lakes, bays, and reservoirs (Cape May County 2015).

3.4.2 Watersheds

A watershed is the area of land that drains into a body of water such as a river, lake, stream, or bay. It is separated from other systems by high points in the area such as hills or slopes. It includes not only the waterway itself but also the entire land area that drains it. For example, the watershed of a lake would include not only the streams entering the lake but also the land area that drains into those streams. Drainage basins generally refer to large areas that encompass the watersheds of many smaller rivers and streams. Figure 3-2 depicts the hydrologic system of a watershed.

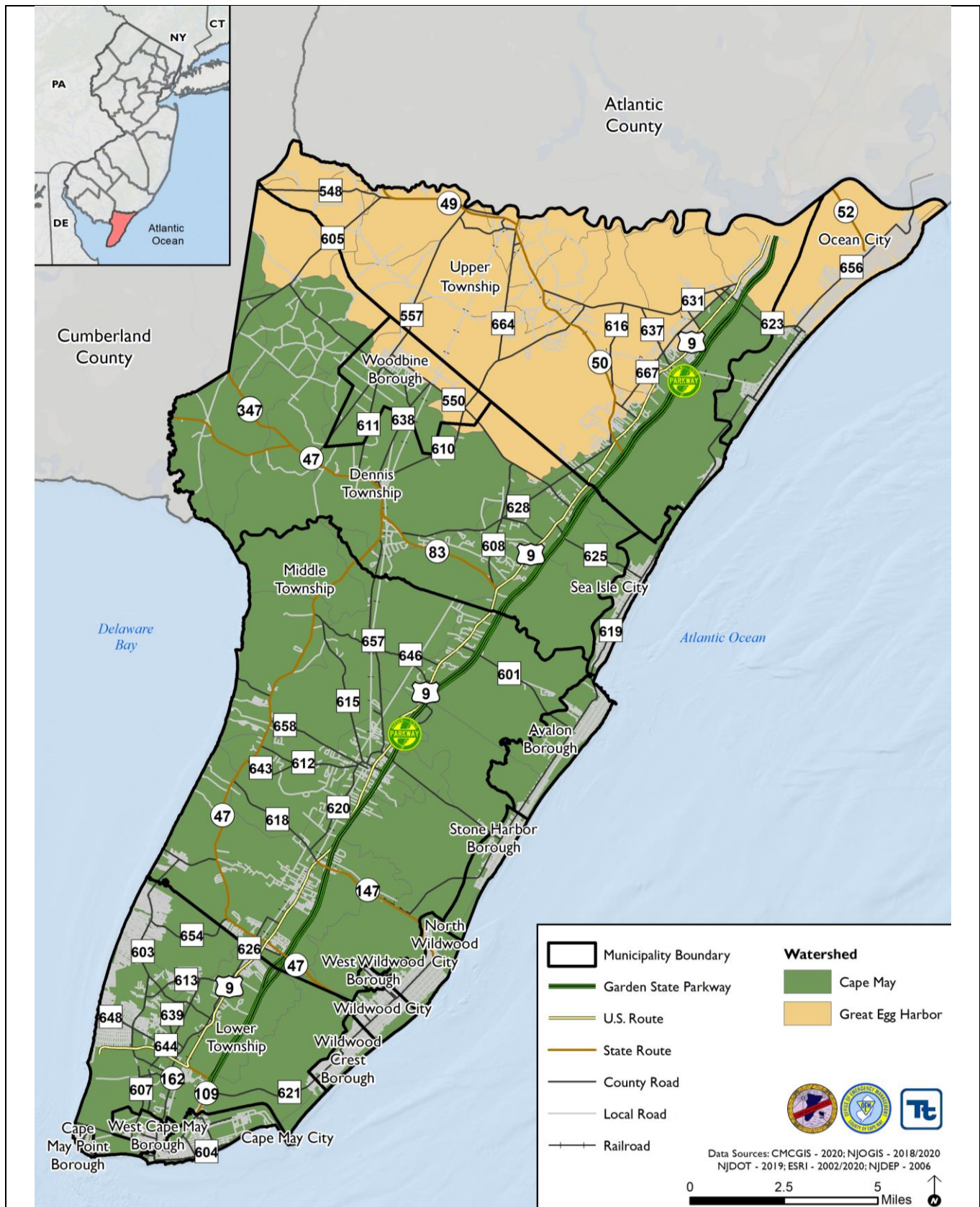
Figure 3-2. Watershed



Source: Riverside-Corona Resource Conservation District 2022

New Jersey is divided into 20 Watershed Management Areas (WMA), which are made up of smaller watersheds. Cape May County is in two of the 20 WMAs: Great Egg Harbor (WMA 15) and Cape May (WMA 16), as shown in Figure 3-3.

Figure 3-3. Watersheds in Cape May County





Watershed Management Area 15: Great Egg Harbor

WMA 15 includes watersheds draining to Great Egg Harbor Bay in Atlantic County. The management area encompasses waters draining eastern Gloucester and Camden Counties. The area includes the following watersheds: Great Egg Harbor River, Tuckahoe River, Absecon Creek and Patcong Creek (State of New Jersey 2019).

The Great Egg Harbor River is 49 miles long and drains an area of 304 square miles. It originates in eastern Gloucester and Camden Counties, an agricultural and suburban area, before flowing through the Pinelands region. The river drains into Great Egg Harbor Bay before emptying into the Atlantic Ocean. The river is tidal downstream of the dam at Mays Landing. Nonpoint source pollution issues related to cropland agriculture dominate the upper reaches of the watershed. In the lower more developed section of the watershed, suburban/urban runoff is the primary contributor (State of New Jersey 2019).

The watershed's dominant land use is forests, with the remainder agricultural and developed. Population centers include Berlin, Winslow, Monroe, Mays Landing, and Egg Harbor City. The major tributaries are Hospitality Branch, Watering Race, Babcock Creek, Deep Run, South River, and Stephens Creek (State of New Jersey 2019).

Watershed Management Area 16: Cape May

Most of Cape May County and portions of eastern Cumberland County form the 334 square mile drainage area of WMA 16. WMA 16 includes watersheds draining the Cape May portion of New Jersey. This area includes Cape May County south and east of the Tuckahoe River watershed and contains minimal surface water flow. Ground water and shellfish harvesting water quality are the principal water issues. No fixed physical/chemical fresh (surface) water monitoring locations are currently located within this management area (State of New Jersey 2019).

The region represents a low lying, gently rolling plain whose highest point is 54 feet above sea level and whose surface is largely covered by wet soils and wetlands. Large swamps (Great Cedar, Timber, and Beaver Swamps) occupy the north-central part of the county. Most, if not all, streams are tidal in their lower reaches and terminate by flowing into fresh water swamps that, in turn, discharge into saltwater marshes near the shore (State of New Jersey 2019).

As stated previously, one of the principal water resource issues within this management area is drinking water supply. The resource is largely dependent upon ground water that is in turn highly vulnerable to saltwater intrusion from the west, south and east, especially in the southern portion of the peninsula (State of New Jersey 2019).

3.4.3 Topography and Geology

Cape May County has three main topographical areas:

- The eastern section of the County is a chain of five low-lying islands that contain most of the County's vacation resorts. From southwest to northeast, the islands extend for 32 miles from the City of Cape May to the City of Ocean City. The sands that make up these barrier beaches form a firm-bottomed beach with gentle slopes into the Atlantic Ocean (Cape May County Planning Board 2005). The five major islands of the County include:
 - Cape Island (including Cape May, West Cape May, Cape May Point, and portions of Lower Township)
 - Five Mile Island (including Wildwood Crest, Wildwood, West Wildwood, North Wildwood, and the Diamond Beach section of Lower Township)
 - Seven Mile Island (including Stone Harbor and Avalon)



- Ludlam Island (including Sea Isle City and the Strathmere section of Upper Township)
- Pecks Beach (including Ocean City)
- To the west of the islands, a band of salt marshes 1.5 to 3.5 miles wide, interlocked with twisting channels and large sounds, separates the resort islands from the remainder of the County. These areas are nearly unpopulated, except for a few small developments located along access causeways. These wetland areas are one of Cape May County's most valuable environmental resources (Cape May County Planning Board 2005).
- Located to the west of the wetlands is the remainder of the County, usually referred to as the mainland. This low relief area contains large, developed areas, freshwater wetlands, and woodland. This area of the County lies less than 25 feet above sea level (Cape May County Planning Board 2005). The entire eastern portion of the mainland consists of broad tidal marshland flanked by the five low-lying barrier islands to the east. These islands contain major resort areas, a main part of the County's economy. The barrier islands extend 32 miles from Ocean City in the north to the City of Cape May in the south. These islands are approximately one mile wide at their widest point with the average width being 0.25 to 0.5 miles (Cape May County 2015).

The overall physiography of Cape May County is a low lying, gently rolling plain. The southernmost part of the County is a low sandy peninsula with elevations ranging from 0 to 27 feet above mean sea level. The Great Cedar Swamp and the Timber and Beaver Swamp are two large wetland areas located in the north-central part of the County (Cape May County 2015). Higher elevation areas are in the northern mainland section of the County in Upper Township and Woodbine and along the Route 9 corridor. Local areas of higher elevation are found on the barrier islands behind dunes and in areas of artificial fill.

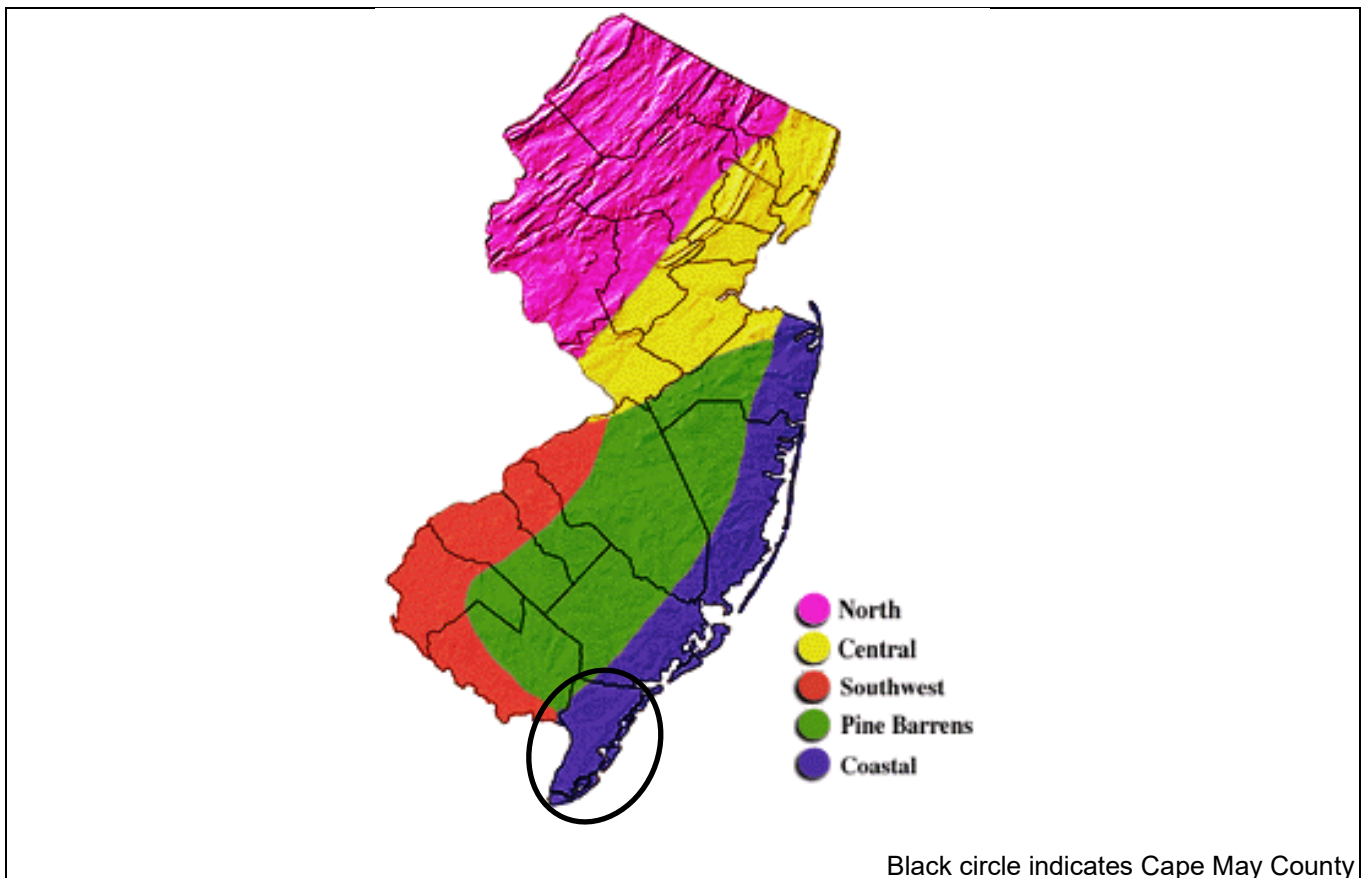
3.4.4 Climate

Current Climate

The State of New Jersey is located approximately halfway between the equator and the North Pole, which influences the State by wet, dry, hot, and cold airstreams and making for daily weather that is highly variable. There is an identified difference in climate between Cape May in the south and the Kittatinny Mountains in northwestern New Jersey. New Jersey has five distinct climate regions: Northern, Central, Pine Barrens, Southwest, and Coastal. A majority of Cape May County is in the coastal climate region, with a small portion located in the Pine Barrens region, as shown in Figure 3-4 (ONJSC 1983).

More specifically, the climate of Cape May County is influenced by its location on the Delaware Bay and the Atlantic Ocean. The mean annual temperature is approximately 55°F, with extremes ranging from -12°F to 105°F. The average annual precipitation is approximately 46 inches and is evenly distributed throughout the year. Normal seasonal snowfall in Cape May County is 14.9 inches (NOAA 2023).

Figure 3-4. Climate Zones in New Jersey



Source: ONJSC 1983

Coastal Climate Region

In the Coastal Climate Region, continental and oceanic influences battle for dominance on daily to weekly bases. In autumn and early winter, when the ocean is warmer than the land surface, the Coastal Zone will experience warmer temperatures than interior regions of the state. In the spring months, ocean breezes keep temperatures along the coast cooler. Being adjacent to the Atlantic Ocean, with its high heat capacity (compared to land), seasonal temperature fluctuations tend to be more gradual and less prone to extremes (ONJSC 1983).

Sea breezes play a major role in the coastal climate. When the land is warmed by the sun, heated air rises, allowing cooler air at the ocean surface to spread inland. Sea breezes often penetrate 5-10 miles inland, but under more favorable conditions, can affect locations 25-40 miles inland. They are most common in spring and summer (ONJSC 1983).

Coastal storms, often characterized as nor'easters, are most frequent between October and April. These storms track over the coastal plain or up to several hundred miles offshore, bringing strong winds and heavy rains. Rarely does a winter go by without at least one significant coastal storm and some years see upwards of five to ten. Tropical storms and hurricanes are also a special concern along the coast. In some years, they contribute a significant amount to the precipitation totals of the region. Damage during times of high tide can be severe when tropical storms or nor'easters affect the region (ONJSC 1983).



Pine Barrens

In the Pine Barrens, Scrub pine and oak forests dominate the interior southern portion of New Jersey, hence the name, Pine Barrens. Sandy soils, which are porous and not very fertile, have a major effect on the climate of this region. On clear nights, solar radiation absorbed during the day is quickly radiated back into space, resulting in surprisingly low minimum temperatures. Atlantic City Airport, which is surrounded by sandy soil, can be 15-20 degrees cooler than the Atlantic City Marina on the bay, which is only about thirteen miles away (ONJSC 1983).

The porous soil permits any precipitation to rapidly infiltrate and leave surfaces quite dry. Drier conditions allow for a wider range between the daily maximum and minimum temperatures and makes the area vulnerable to forest fires (ONJSC 1983).

Recent Climate Trends

The Office of the State Climatologist at Rutgers University has been tracking temperature and precipitation records in the State of New Jersey since 1895. Their data reveals a significant increase in the state's average annual temperature by 3.5°F over the past century. This warming trend in the State of New Jersey is more pronounced than in the rest of the Northeast region, which has seen a 2°F increase, and the global average increase of 1.5°F (NJDEP 2020).

Since 1970, the rate of warming in New Jersey has accelerated. Analysis of data up to the end of 2019 shows that the ten warmest years on record have all occurred since 1990, while the 10 coldest years were all before 1940. The warmest year on record was 2012, with an average annual temperature 4.1 °F above the long-term average (1895-2019) and 3.0 °F above the 30-year normal. Additionally, the four warmest winters have occurred since 1998, and the eight warmest summers since 1999 (NJDEP 2020).

Seasonal analyses indicate that winter months (December, January, February) and summer months (June, July, August) have experienced significant warming. From 1990 to 2019, there were 43 instances of months with top-5 warmest average temperatures, while no months recorded a top five coldest average temperature in the same period. The last top five coldest month was December 1989.

Future Climate

Projections

Projections indicate that the State of New Jersey will continue to warm. Global climate models, which consider future greenhouse gas emissions, predict unprecedented warming in the 21st century. Under both high and low emissions scenarios, annual temperatures are expected to be as warm as the warmest years in the historical record. By 2050, average annual temperatures in New Jersey could be 1°F (0.6°C) to 6°F (3.3°C) warmer, and by 2100, they could be 3°F to 9°F warmer under a lower emissions scenario, and 6°F to 13°F warmer under a higher emissions scenario (NJDEP 2020). Projections suggest that annual precipitation in New Jersey could increase by 4 percent to 11 percent (NJOEM 2024).

By mid-century, around 70 percent of summers in the Northeast are expected to be hotter than the warmest summer to date. This increase in average annual temperatures will lead to more intense heat waves and fewer cold waves, extending the growing season. Consequently, the number of sub-freezing days and snow accumulation will decrease. Heatwaves are projected to increase in frequency, duration, and spatial extent, resulting in adverse impacts such as lower agricultural yields, higher energy consumption, reduced power plant efficiency, increased air pollution, negative effects on human health, and greater water loss through evapotranspiration (NJDEP 2020)



Addressing Climate Change Impacts

Climate change is increasingly impacting both people and resources in New Jersey, with these effects projected to intensify over time. The state is already experiencing noticeable impacts related to rising temperatures and sea-level rise. These changes are evident in various sectors, including agriculture, infrastructure, and public health. To address these challenges, the New Jersey Department of Environmental Protection (NJDEP) and other state agencies are actively working on strategies to mitigate and adapt to the effects of climate change (NJ Department of Labor and Workforce Development 2024).

One significant initiative is the New Jersey Climate Change Resilience Strategy Report (2021), which aims to provide decision-makers with comprehensive information on the state's vulnerability to climate change. This assessment facilitates the development of adaptation strategies that are informed by both local experiences and scientific knowledge. By understanding the specific risks and vulnerabilities, New Jersey can better prepare for and respond to the impacts of climate change (NJDEP 2020).

3.4.5 Land Cover

As shown on Figure 3-5 and listed in Table 3-2, wetland land cover is the largest single land cover type in Cape May County, followed by forest and urban land cover. A breakdown of wetland area by jurisdiction, as provided in Table 3-3 shows that wetlands account for more than half of the total area in some jurisdictions in the County (Avalon, Dennis, Middle, West Cape May, and West Wildwood).

3.5 LAND USE

3.5.1 Current Land Use

Cape May County is approximately 286 square miles, or 183,126 acres in total, with 158,824 acres consisting of land area, excluding water bodies, based upon New Jersey Department of Environmental Protection (NJDEP) 2015 Land Use Land Cover). The municipalities located along the barrier islands along the Atlantic Ocean are primarily developed, with the exception of the wetland areas, which are located between the islands and the mainland. The County's mainland consists of a combination of urban and rural development patterns largely based on sewer service areas. Table 3-4 displays the land use in Cape May County by jurisdiction.

3.5.2 Land Use Trends

While wetlands were the predominant land cover type overall, the predominant land cover type was different in several municipalities. For example, forest cover was the largest land cover type in Woodbine Borough; urban areas were the largest land cover type in Cape May City, Cape May Point Borough, North Wildwood City, Sea Isle City, West Cape May Borough, West Wildwood Borough, Wildwood City, and Wildwood Crest Borough; and water surface occupied the largest area of the jurisdictions of Ocean City and Stone Harbor Borough. Wetlands were the largest land cover type in Avalon Borough, Dennis Township, Lower Township, Middle Township, and Upper Township. Residential uses were the largest land use of urban areas in all municipalities, which is consistent with Cape May County overall (Cape May County Planning Department 2022).

Figure 3-5. Cape May County Land Cover

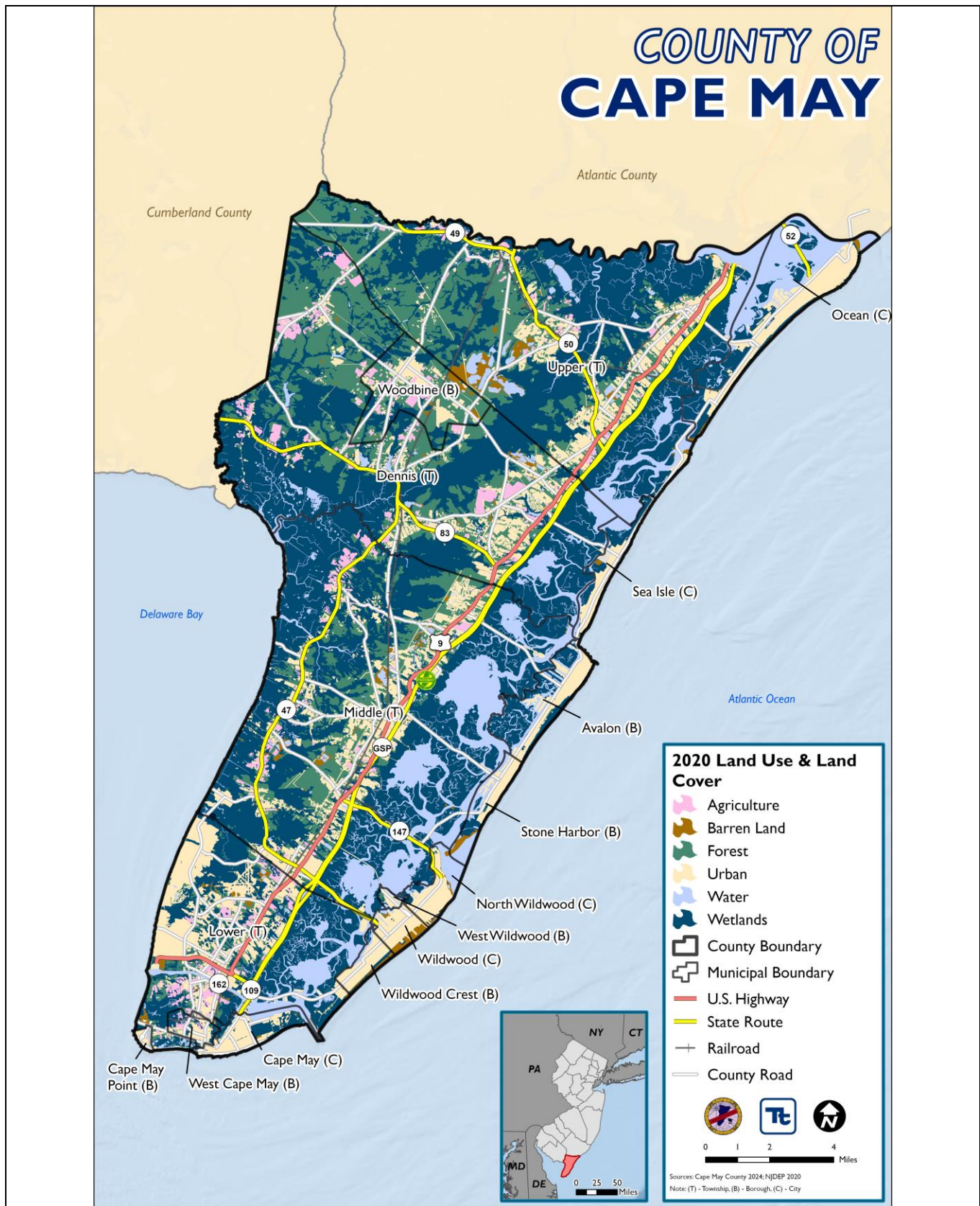




Table 3-2. Cape May County 2015 Land Cover Type

Category	Total Area in Category	
	Acres	% of Total
Agricultural	5,452.8	3.0%
Barren	2,963.2	1.6%
Forest	34,617.6	18.9%
Urban	34,393.6	18.8%
Water	24,300.8	13.3%
Wetlands	81,395.2	44.4%

Source: (Cape May County Planning Department 2022)

Table 3-3. Acres of Wetlands in Cape May County

Jurisdiction	Total Area (acres)	Wetland	
		Area (acres)	% of Total Jurisdiction Area
Avalon (B)	3,179	1,633	51.4%
Cape May (C)	1,845	649	35.2%
Cape May Point (B)	192	87	45.2%
Dennis (T)	40,820	21,435	52.5%
Lower (T)	19,852	8,405	42.3%
Middle (T)	52,934	28,550	53.9%
North Wildwood (C)	1,594	154	9.7%
Ocean (C)	7,553	2,043	27.1%
Sea Isle (C)	1,765	761	43.1%
Stone Harbor (B)	1,480	470	31.8%
Upper (T)	43,784	21,427	48.9%
West Cape May (B)	757	534	70.6%
West Wildwood (B)	233	158	67.7%
Wildwood (C)	1,058	56	5.3%
Wildwood Crest (B)	948	326	34.3%
Woodbine (B)	5,132	1,619	31.5%
Cape May County	183,124	88,306	48.2%

Source: Cape May County 2024; NJDEP 2020

Note: (B) Borough; (C) City; (T) Township



Table 3-4. Cape May County 2021 Land Use Classification, Parcel Count by Jurisdiction

Jurisdiction	Class 1 - Vacant	Class 2 - Residential	Class 3A - Farm (Regular)	Class 3B - Farm (Qualified)	Class 4A - Commercial	Class 4B - Industrial	Class 4C - Apartment	Class 5A - Class 1 Railroad	Class 5B - Class 2 Railroad	Class 6A - Telephone	Class 15A - Public School	Class 15B - Other (Private) School	Class 15C - Public	Class 15D - Church and Charitable	Class 15E - Cemeteries and Graveyards	Class 15F - Other Exempt	Undetermined	Total
Avalon (B)	144	5,325	0	0	154	0	0	0	0	0	1	3	98	10	0	2	6,801	12,538
Cape May (C)	129	3,459	0	0	252	0	94	0	0	0	3	0	172	15	0	42	1,552	5,718
Cape May Point (B)	44	633	0	0	1	0	0	0	0	0	0	0	27	6	0	3	203	917
Dennis (Twp)	468	3,526	58	209	202	0	0	0	0	0	4	2	593	16	10	67	717	5,872
Lower (Twp)	655	13,011	13	53	275	0	5	0	0	0	7	2	347	116	3	111	11,356	29,954
Middle (Twp)	2,491	8,591	3	40	533	3	10	1	0	0	11	1	725	86	8	103	1,245	13,851
North Wildwood (C)	91	2,960	0	0	157	0	45	0	0	0	1	1	95	20	0	15	3,312	6,697
City of Ocean City (C)	511	16,930	0	0	554	2	33	0	0	0	6	3	911	45	0	30	2,291	21,316
Sea Isle City (C)	389	5,873	0	0	137	0	0	0	0	1	1	0	348	8	0	13	6,957	13,727
Stone Harbor (B)	64	2,852	0	0	193	0	1	0	0	0	2	0	59	6	0	226	3,1336	6,539
Upper (Twp)	908	5,605	21	85	421	1	3	28	0	0	5	0	1,475	23	6	64	5,466	14,111
West Cape May (B)	80	962	2	12	37	0	2	3	0	0	2	0	38	1	1	6	102	1,248
West Wildwood (B)	154	690	0	0	9	0	2	0	0	0	0	0	31	1	0	3	56	946
Wildwood (C)	234	1,770	0	0	491	5	151	0	0	0	2	0	62	22	0	16	2,232	4,985
Wildwood Crest (B)	58	5,062	0	0	136	0	28	0	0	0	2	0	83	5	0	10	3,193	8,577
Woodbine (B)	149	846	0	27	61	6	1	0	1	0	4	0	197	18	2	4	55	1,371
Cape May County	6,569	78,095	97	426	3,613	17	375	32	1	1	51	12	5,261	398	30	715	48,674	144,367

Source: Cape May County Planning Department 2022

Note: (B) = borough; (C) = city; (Twp) = township



Throughout Cape May County, approximately 29,766.4 acres, or 16.3 percent, of total area has experienced a change in land cover between 2002 and 2015. Within these 29,766.4 acres, 22,118.4 acres experienced change within the same land use type (e.g., conversion from cropland to orchard, both of which are an agricultural land cover) and 7,648 acres experienced a more significant change in land cover type from one type to another (e.g., from an agricultural use to a residential use) (Cape May County Planning Department 2022).

Residential and Commercial

Cape May County can be said to consist of two general regions: the barrier islands; and the mainland. The barrier islands, which are located along the Atlantic Ocean coastline, are the most intensely developed part of Cape May County. They contain resort communities, such as Cape May City, North Wildwood City, West Wildwood Borough, Wildwood City, Wildwood Crest Borough, Stone Harbor Borough, Avalon Borough, Sea Isle City, and Ocean City, and generally contain a mix of residential and commercial uses, with undeveloped areas primarily being beach, dune, and related open space areas (Cape May County Planning Department 2022).

Those municipalities identified as resort communities are found along the eastern border of the County and contain the most concentrated growth. The most common type of land use in these municipalities is residential, consisting mainly of seasonal homes. Commercial development is primarily tourist oriented and consists of large amusement areas, marinas, and various smaller attractions and facilities. Some industrial uses, primarily fishing related, are in the barrier islands. Most other industrial uses, however, are in mainland areas primarily because of the high cost of land in the barrier islands. It should be noted that these are light industrial uses. Because of the County's sensitive environment and relatively isolated location, heavy industry is almost non-existent (Cape May County Planning Department 2022).

The mainland portions of Cape May County, on the other hand, are largely semi-rural in character, with extensive woodland and agricultural areas as well as concentrated areas of residential and commercial development, frequently within proximity of key intersections along the US Route 9 and NJ Route 47 corridors. Industrial development in this part of the County is sparse. Due to the County's location and lack of adequate rail facilities contributes to this. There are small industrial parks found at the County Airport in Lower Township and in Middle Township on County Road 618. The remainder of the mainland portion of Cape May County is classified as semi-rural with light residential/commercial development scattered throughout. In addition, Cape May County contains extensive wetland areas, which are largely concentrated between and serve as a transition between the barrier islands and the mainland. There are also large areas of woodland and farmland (Cape May County Planning Department 2022).

Open Space and Parkland

County-owned open space and recreational land is comprised of two main categories: the County Park System and lands purchased by the County Open Space Preservation Program. A third minor category consists of three small fishing piers (Scotch Bonnet Pier along Stone Harbor Boulevard and North Wild Boulevard Pier, both in Middle Township and the Ocean City-Longport Bridge Fishing Pier) maintained by various County departments and entities (Cape May County Planning Department 2007).

The Cape May County Park system is comprised of four distinct sites. County Park North, in Upper Township along the N.J. Route Nine corridor (25 acres), is officially known as the Richard K. Cameron Wildlife Sanctuary. The most active site, located in the center of the County in Cape May Court House, is known as Park Central (265 acres). This is the most visited site and contains many recreational facilities, as well as the popular County Zoo. Fishing Creek Park (1,508 acres), sometimes referred to as County Park South, is located in the Del Haven section of Middle Township near the Delaware Bay. The fourth and smallest site is the Avalon Manor Fishing Pier (0.2 acres),



located in the Avalon Manor section of Middle Township. Together these sites provide approximately 1,800 acres of county owned recreational land (Cape May County Planning Department 2007).

On November 9, 1989, the voters of Cape May County approved, by a two to one margin, a ballot question endorsing the establishment of a trust fund to preserve open space and agricultural land. The trust is funded by a county property tax of one cent per \$100 of assessed valuation and currently generates approximately 4.5 million dollars annually. The properties acquired through this program, together with those of the County Park system, comprise all open space lands under County jurisdiction (Cape May County Planning Department 2007).

The County has a total of 73,620 acres of open space, which represents approximately 45% of the total land area of Cape May County. While this appears to be an excessive percentage, it should be noted that the vast majority of these lands are inaccessible wetlands and restricted Federal wildlife lands, and, though valuable wildlife habitat and worthy of preservation in their own right, these lands are not generally thought of as traditional "active" recreational open space. Table 3-5 shows the totals identified by land ownership (Cape May County Planning Department 2007).

Table 3-5. Acres of Land by Ownership

Land Ownership	Acres of Land
Federal Recreation Open Space Areas	10,705
State Parks, Forests, Natural Areas, Marinas & Historic Sites	23,216
State Wildlife Management Areas	24,809
State Natural Lands Trust	416
State Miscellaneous Areas	5,400
County Parks	2,045
Municipal Parks	4,442
Nonprofit Open Space	2,587
Total Open Space	73,620

Source: Cape May County Planning Department 2007

Agriculture

Agricultural land in the State is used primarily for the production of food and fiber. This includes cropland, pastureland, and orchards. According to the NJDEP, agricultural land includes pasturelands and grazing lands associated with horse or cattle raising operations, orchards, vineyards, nurseries, and other horticultural areas. Other lands used in support of agricultural activities, such as farmsteads, associated barns, stables, and corrals, are also present throughout the State (NJDEP 2012).

Due to higher production costs related to land values, property taxes and labor costs, New Jersey farmers are at a disadvantage compared to farmers in other areas of the country. Cape May County farmers in particular are faced with the added complication of limited resources to support existing farming operations, let alone expansion. Among the trends experienced by Cape May County's agricultural community are increases in the attractiveness of buying local products, pick-your-own farms, farmers markets, agritourism operations, and the County's tourism industry (Cape May Agriculture Development Board 2022).

Agriculture is an integral part of the natural landscapes that comprise the County. According to the 2022 Census of Agriculture, there were 7,821 acres of farmland in the County. This is less than the 2017 survey which indicated that there were 8,135 acres of farmland. In 2022, there were 171 active farms in the County. The number of farms



has increased 4 percent from 2017. Table 3-6 outlines the number of farms, average farm size and total acreage of farms in Cape May County from 1950 to 2022 (USDA 2024).

Table 3-6. Farms in Cape May County, 1950 to 2022

Year	Number of Farms	Average Farm Size (acre)	Total Acreage
1950	315	71	29,212
1954	409	91	28,569
1959	256	78	19,991
1964	183	97	17,738
1969	111	143	15,893
1974	81	139	11,295
1978	108	139	15,013
1982	117	120	13,992
1987	124	109	13,553
1992	163	71	11,644
1997	149	65	9,669
2002	197	51	10,037
2007	201	40	7,976
2012	152	48	7,352
2017	164	50	8,135
2022	171	46	7,821

Source: USDA 2024

Table 3-7 outlines the top crop items grown in Cape May County, along with the number of acres devoted to these crops. The table indicates that nursery stock crops are the predominant crop in the County. Cape May County ranks fourth in State for its aquaculture production and ninth in the State for its products from hogs and pigs and sheep, goats, wool, mohair, and milk (USDA 2024).

Table 3-7. Cape May County Farmland by Crop (Acres): 2017 and 2022

Crop Type	2017	2022
Nursery stock crops	753	1,074
Soybeans for beans	290	-
Corn for grain	-	194
Forage - land used for all hay and haylage	884	731
Vegetables harvested for sale	238	120

Source: USDA 2024

Cape May County has adopted a Comprehensive Farmland Preservation Plan which lays out a strategy for preservation of this vital resource. Since 1989, 3,810 acres of farmland have been preserved in the County. Of this total, Cape May County has participated in the preservation of the majority of the farms, totaling 3,663 acres. The State Agriculture Development Committee has preserved over 146 acres of farmland through its easement and fee simple programs (Cape May Agriculture Development Board 2022).



Cape May County established a trust fund in 1989 to preserve its agricultural land and open space. The trust fund is funded by a tax of \$0.01 per \$100 of assessed property valuation and produces approximately \$5.7 million annually. The trust fund provides funding for the County's farmland preservation program, land acquisition for open space spaces, park and recreation development, and historic preservation (Cape May Agriculture Development Board 2022).

3.6 POPULATION AND DEMOGRAPHICS

3.6.1 Current Population

According to the 2020 U.S. Census, Cape May County has a population of 95,263 people. The Township of Lower has the largest jurisdictional population within the county, with 23.2 percent of the county total. Figure 3-6 displays the population per square mile by census tract across the county.

3.6.2 Population Trends

Population trend information was evaluated to estimate future shifts that could significantly change the character of the area. Population trends can provide a basis for making decisions on the type of mitigation approaches to consider and the locations in which these approaches should be applied. This information can also be used to support planning decisions regarding future development in vulnerable areas.

As seen in Table 3-8, Cape May County's population increased over most decades from 1960 through 2000, with declines in the two decades since then. Population projections for Cape May County from the New Jersey Department of Labor indicate a further decline through 2029 followed by a slight increase by 2034, as seen in Table 3-9.

3.6.3 Socially Vulnerable Populations

Socially vulnerable populations are people who may be more susceptible to hazard events based on factors such as their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. This HMP considers several socially vulnerable population groups: persons over the age of 65, persons under the age of 5, non-English speaking people, people with disabilities, and people living below the poverty level (as defined by the U.S. Census Bureau). Census data on these populations in Cape May County, taken from the 2022 American Community Survey (ACS) 5-year estimates, are listed in Table 3-10 and distributed as shown in Figure 3-7.

Figure 3-6. Total Population in Cape May County

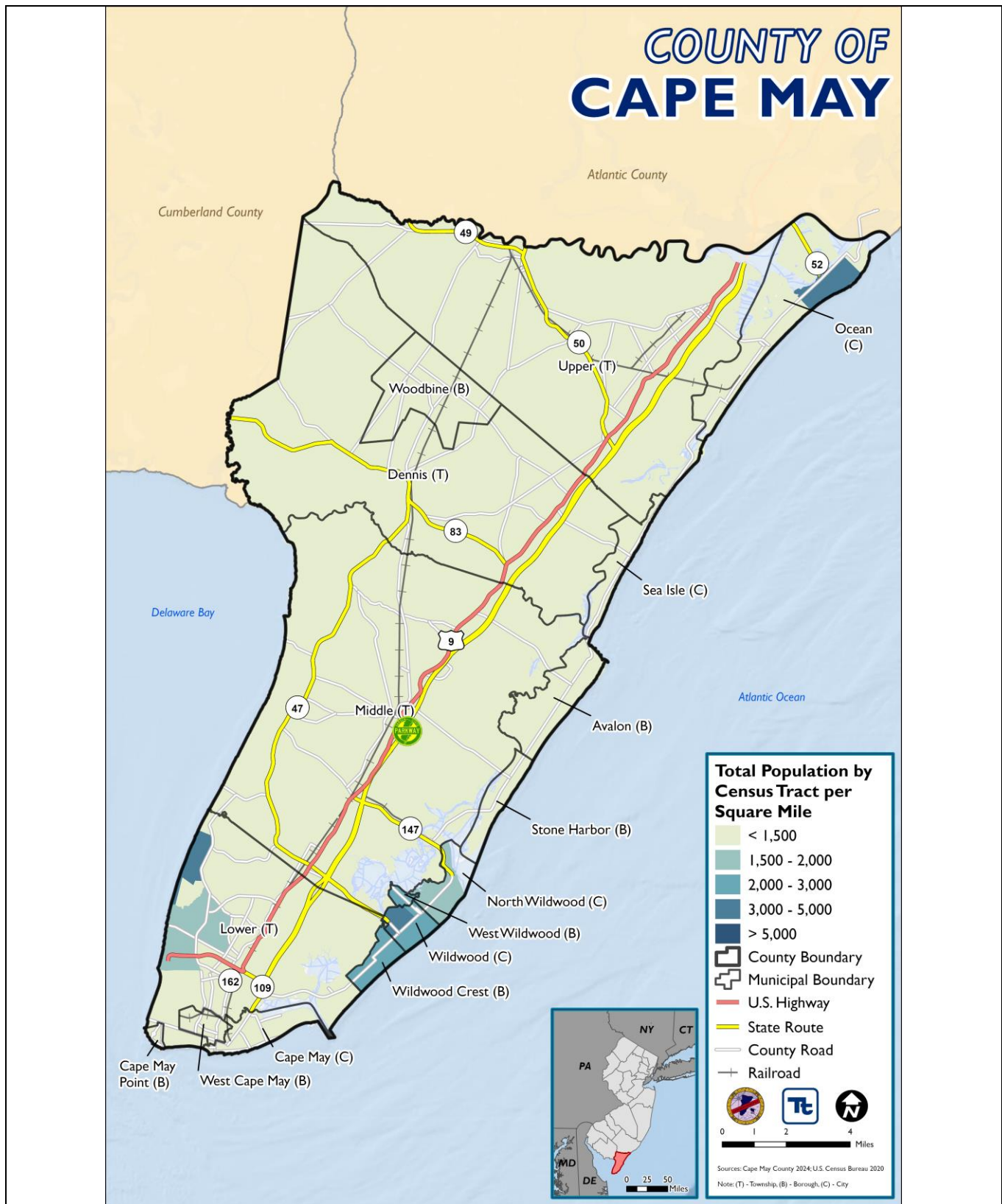




Table 3-8. Historical Population Change in Cape May County

	Population						
	1960	1970	1980	1990	2000	2010	2020
Avalon (B)	695	1,283	2,162	1,809	2,143	1,334	1,243
Cape May (C)	4,477	4,392	4,853	4,668	4,034	3,607	2,768
Cape May Point (B)	263	204	255	248	241	291	305
Dennis (Twp)	2,327	2,635	3,989	5,574	6,492	6,467	6,285
Lower (Twp)	6,332	10,154	17,105	20,820	22,945	22,864	22,057
Middle (Twp)	6,718	8,725	11,373	14,771	16,405	18,911	20,380
North Wildwood (C)	3,598	3,914	4,714	5,017	4,935	4,041	3,621
City of Ocean City (C)	7,618	10,575	13,949	15,512	15,378	11,701	11,229
Sea Isle City (C)	1,393	1,712	2,644	2,692	2,835	2,114	2,104
Stone Harbor (B)	834	1,089	1,187	1,025	1,128	866	796
Upper (Twp)	2,539	3,413	6,713	10,681	12,115	12,373	12,539
West Cape May (B)	1,030	1,005	1,091	1,026	1,095	1,026	1,010
West Wildwood (B)	207	235	360	453	448	603	540
Wildwood (C)	4,690	4,110	4,913	4,484	5,436	5,325	5,157
Wildwood Crest (B)	3,011	3,483	4,149	3,631	3,980	3,270	3,101
Woodbine (B)	2,823	2,625	2,809	2,678	2,716	2,472	2,128
Cape May County	48,555	59,554	82,266	95,089	102,326	97,265	95,263

Source: State of New Jersey 2017; U.S. Census 2023; New Jersey Department of Labor 2001; U.S. Census Bureau 2020 Decennial Total Population

Note: (B) = borough; (C) = city; (Twp) = township

Table 3-9. Historical and Projected Population Change in Cape May County

Historical Cape May County Population							Projected Cape May County Population	
1960	1970	1980	1990	2000	2010	2020	2029	2034
48,555	59,554	82,266	95,089	102,326	97,265	95,263	93,300	93,400

Source: State of New Jersey 2017; U.S. Census 2023; New Jersey Department of Labor 2001; U.S. Census Bureau 2020 Decennial Total Population



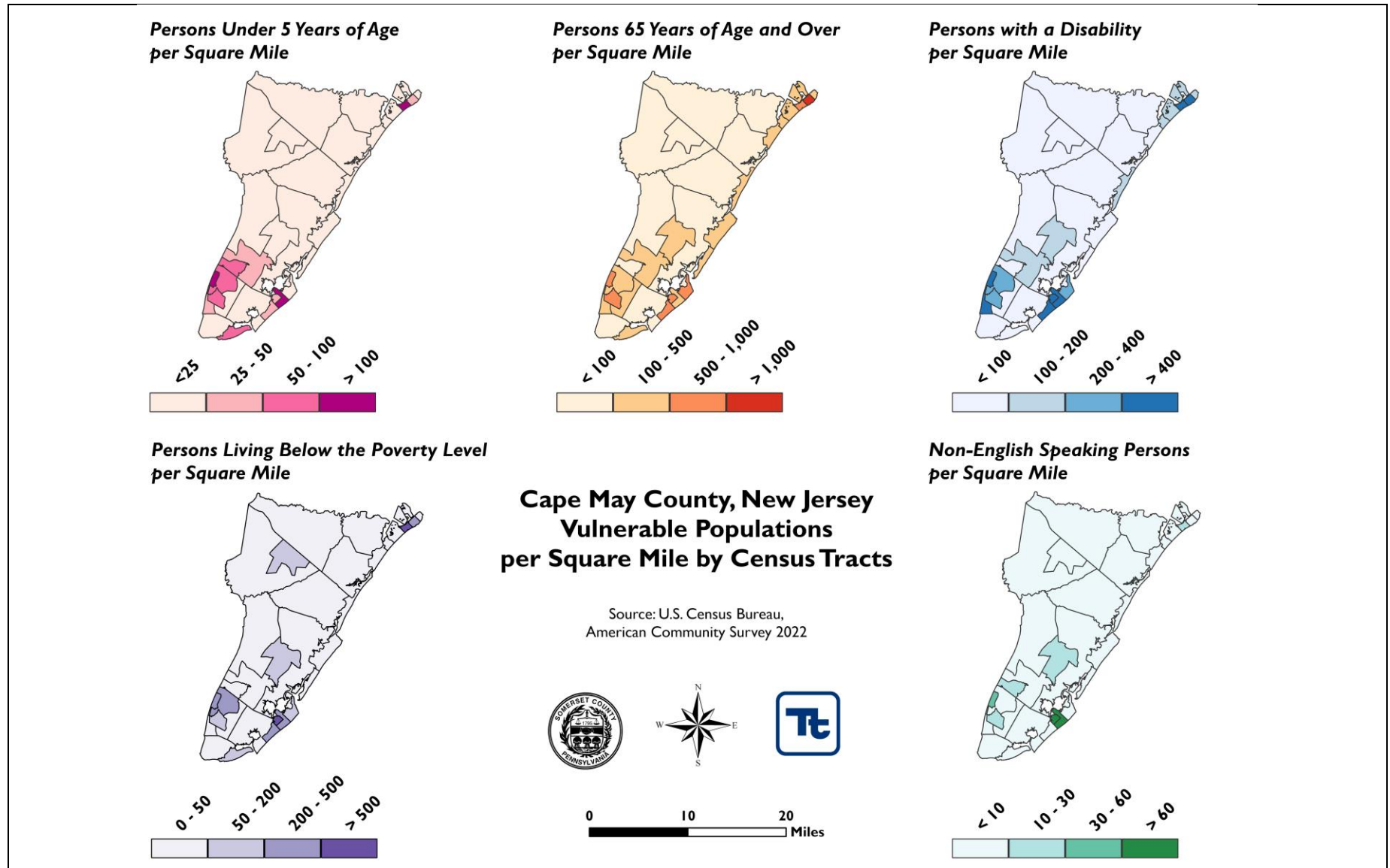
Table 3-10. Cape May County Population and Demographic Statistics 2022 Census, American Community Survey 5-Year Estimates

Jurisdiction	65 and Older		5 and Younger		Non-English-Speaking		Disability		Below Poverty Level	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Avalon (B)	764	61.5%	21	1.7%	0	0.0%	160	12.9%	71	5.7%
Cape May (C)	774	28.0%	139	5.0%	43	1.6%	167	6.0%	139	5.0%
Cape May Point (B)	118	38.7%	0	0.0%	0	0.0%	43	14.1%	26	8.5%
Dennis (Twp)	1,305	20.8%	483	7.7%	35	0.5%	596	9.5%	325	5.2%
Lower (Twp)	5,517	25.0%	1,111	5.0%	218	1.0%	3,632	16.5%	2,369	10.7%
Middle (Twp)	4,833	23.7%	956	4.7%	497	2.4%	2,971	14.6%	1,783	8.7%
North Wildwood (C)	1,693	46.8%	0	0.0%	0	0.0%	702	19.4%	267	7.4%
City of Ocean City (C)	3,821	34.0%	206	1.8%	41	0.4%	1,477	13.2%	1,142	10.2%
Sea Isle City (C)	1,028	48.9%	6	0.3%	13	0.6%	263	12.5%	113	5.4%
Stone Harbor (B)	455	57.2%	19	2.4%	0	0.0%	83	10.4%	57	7.2%
Upper (Twp)	3,035	24.2%	709	5.7%	65	0.5%	1,177	9.4%	221	1.8%
West Cape May (B)	367	36.3%	42	4.2%	11	1.1%	126	12.5%	27	2.7%
West Wildwood (B)	179	33.1%	35	6.5%	0	0.0%	107	19.8%	18	3.3%
Wildwood (C)	799	15.5%	185	3.6%	374	7.2%	1,110	21.5%	903	17.5%
Wildwood Crest (B)	1,346	43.4%	56	1.8%	0	0.0%	673	21.7%	336	10.8%
Woodbine (B)	495	23.3%	149	7.0%	112	5.3%	762	35.8%	646	30.4%
Cape May County	26,529	27.8%	4,117	4.3%	1,408	1.5%	14,049	14.7%	8,443	8.9%

Source: U.S. Census Bureau 2022 ACS Vulnerable Population Totals

Note: (T) - Township, (C) - City, (B) - Borough

Figure 3-7. Socially Vulnerable Populations in Cape May County





Age

Children are considered vulnerable to hazard events because they are dependent on others to safely access resources during emergencies and may experience increased health risks from hazard exposure. The elderly are more likely to lack the physical and economic resources necessary for response to hazard events and are more likely to suffer health-related consequences. Those living on their own may have more difficulty evacuating their homes. The elderly are more likely to live in senior care and living facilities where emergency preparedness occurs at the discretion of facility operators.

According to the 2022 ACS 5-year estimates, the median age in Cape May County was 50.9 years. The 2022 ACS reports 4.3 percent of the population of Cape May County is under the age 5. Of the 2022 population, 27.8 percent of the county's population is age 65 and older.

Language Proficiency

Individuals who are not fluent or working proficiency in English are vulnerable because they can have difficulty with understanding information being conveyed to them. Cultural differences also can add complexity to how information is being conveyed to populations with limited proficiency of English (Centers for Disease Control 2022). According to the 2022 ACS 5-year estimates, 8,343 individuals over the age of 5 primarily speak a language other than English at home; within that group approximately 2,719 individuals are reported as speaking English "less than very well". Of the County's population, 4,978 speak Spanish, 515 speak Asian and Pacific Island languages and 2,304 speak other Indo-European languages.

Disability Status

According to the Centers for Disease Control, "a disability is any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions)" (Centers for Disease Control 2024). Cognitive impairments can increase the level of difficulty that individuals might face during an emergency and reduce an individual's capacity to receive, process, and respond to emergency information or warnings. Individuals with physical or sensory disability can face issues of mobility, sight, hearing, or reliance on specialized medical equipment. According to the 2022 ACS 5-year estimates, 14,049 residents in Cape May County are living with a disability. This includes individuals with hearing, vision, cognitive, ambulatory, self-care, and independent living difficulties.

Income

Of the total population, economically disadvantaged populations are more vulnerable because they are likely to evaluate their risk and make decisions based on the major economic impact on their family and may not have funds to evacuate. The 2022 ACS 5-year estimates provides that the median household income in Cape May County was \$83,870. The U.S. Census Bureau identifies households with two adults and two children with an annual household income below \$25,926 per year as *low income* (Census 2022). The 2022 ACS 5-year estimates indicates that 8.9 percent of persons live below the poverty level within the County.

While the poverty threshold is typically used as a standard for identifying low-income populations, the Steering Committee noted that households may be above the poverty threshold but still struggle financially, making them socially vulnerable to hazard events. The County also used data available from United for ALICE. ALICE stands for Asset Limited, Income Constrained, Employed. This dataset is meant to identify households with income above the federal poverty threshold but below the basic cost of living. This represents the growing number of families who are unable to afford the basics of housing, childcare, food, transportation, health care, and technology (United For ALICE 2024). Costs associated with hazard events could exceed the financial capacity of these households, making



them highly vulnerable to hazard events. According to 2021 Point-in-Time-Data from ALICE, 26 percent of the 48,860 households in Cape May County are ALICE households (compared to the state average of 26 percent). See Table 3-11 for ALICE data by jurisdiction.

Table 3-11. Cape May County ALICE Data

Name	% Below ALICE Threshold	# of Households Below ALICE
Avalon (B)	22%	154
Cape May (C)	41%	487
Cape May Point (B)	unavailable	unavailable
Dennis (Twp)	23%	534
Lower (Twp)	39%	3,840
Middle (Twp)	34%	2,919
North Wildwood (C)	40%	679
City of Ocean City (C)	35%	1,874
Sea Isle City (C)	34%	368
Stone Harbor (B)	27%	136
Upper (Twp)	26%	1,308
West Cape May (B)	35%	161
West Wildwood (B)	50%	107
Wildwood (C)	55%	1,260
Wildwood Crest (B)	48%	865
Woodbine (B)	66%	540
Cape May County (Total)	8%	15,231

Source: United For ALICE 2024

Note: Data unavailable for the Borough of Cape May Point.

3.7 ECONOMY

3.7.1 Major Institutions

Cape May County contains major employers, human services providers, retail and service businesses, and recreational sites. Modern-day Cape May County has come a long way from its early agricultural start, and now prides itself on health, wellness, and hospitality. The County is a travel destination, containing major resorts such as the Monterey, Riviera, and Montreal Beach resorts, and multiple camping resorts including Beachcomber, Ocean View, and Shady Pines. Furthermore, the County is home to many of the State's wineries and craft breweries such as Cape May Winery, Willow Creek Winery, and Cape May Brewing Company (Cape May County Chamber of Commerce n.d.). The accredited Cape May County Zoo was created in 1978 within the Cape May County Park, and houses 550 animals, which represent 250 different species (Cape May County n.d.). Cape May County contains one higher education institution, the Atlantic Cape Community College.



3.7.2 Employment

Table 3-12 displays the labor force, employment, unemployment, and unemployment rate for Cape May County between 2020 and 2023.

Table 3-12. Cape May County Labor Force Estimates, 2020-2023

Year	Cape May County				New Jersey Unemployment Rate
	Labor Force	Employment	Unemployment	Unemployment Rate	
2020	45,700	39,500	6,300	13.7%	9.4%
2021	47,100	42,700	4,400	9.3%	6.7%
2022	47,300	44,100	3,200	6.8%	3.9%
2023	48,500	44,800	3,700	7.6%	4.4%

Source: NJ Department of Labor and Workforce Development 2024

Note: The COVID-19 Pandemic reached its height in 2020, which greatly impacted the unemployment rates in the County, State, and Nationwide.

The U.S. Census Bureau's County Business Pattern provides an annual series of sub-national economic data by industry covering the majority of the country's economic activity. According to the 2021 Cape May County Business Pattern, the county had a total of 3,794 business establishments. These businesses provided more than \$1.3 million in payroll. Three industries dominate private employment in the County: Retail Trade (6,042 people), Accommodation and Food Service (5,126 people), and Health Care and Social Assistance (4,143 people) (US Census 2021).

3.7.3 Income

The average household income in the County, according to the 2022 ACS 5-year estimates, was \$80,845, which is below the state (\$96,341) and national (\$74,755) figures. Table 3-13 shows the median household income in Cape May County between 2018 and 2022, as calculated by the United States Census Bureau.

Table 3-13. Cape May County Median Household Income, 2018-2022

Year	Cape May County Median Household Income	New Jersey Median Household Income	National Median Household Income
2018	\$62,175	\$81,777	\$61,937
2019	\$66,565	\$85,786	\$65,712
2020	\$75,829	\$87,095	\$67,340
2021	\$74,896	\$89,227	\$69,717
2022	\$80,845	\$96,341	\$74,755

Source: U.S. Census 2023

3.7.4 Economic Trends

Cape May County's economy continues to be focused on retail trade, hospitality, and tourism. The 2022 Cape May County Tourism Economic Impacts report notes that the County had fully recovered from the COVID-19 pandemic and surpassed 2019 tourism expenditures by \$499 million. In 2022, the County had 11.38 million visitors (4.21



daytime, 7.17 million overnight). The number of visitors supported direct employment – employing 30,352 for tourism-related activities, which was a 7.2 percent increase from 2021 (Cape May County 2022).

Relying on tourism can be risky, given the current economic forecasts of high inflation and rising oil prices, which could deter visitors to Cape May County. However, it has been noted visitors are offsetting their vacation budgets by shortening stays and cutting costs for dining, shopping, and entertainment. Cape May County is within a 300-mile radius of close to 30-million persons, making daytrips to the County a choice for many to still contribute to the economy and enjoy the many attractions (Cape May County 2022).

The rate of increase in median household income has been consistently growing and has remained above the national median household income over the past five years, despite being regularly around \$20,000 below the State median household income (U.S. Census 2023).

3.8 GENERAL BUILDING STOCK

3.8.1 Existing Development

For this HMP update, an inventory of 130,012 structures was identified from available tax data and spatial data. These structures account for an estimated replacement cost value of \$237 billion. Estimated content value was calculated by using 50 percent of the residential replacement cost value, and 100 percent of the non-residential replacement values. Using this methodology, approximately \$86 billion in contents exist within these properties. Approximately 79.3 percent of the total buildings in the County are residential, which make up 81.5 percent of the total building stock value. Table 3-14 presents building stock statistics by occupancy class for Cape May County.

According to 2022 ACS data, there are 48,563 households are located in Cape May County. A household includes all the people who occupy a housing unit as their usual residence. The ACS data identified 99,408 housing units in the county. A housing unit is a house, apartment, mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters (or if vacant, intended for occupancy as separate living quarters). According to the 2022 ACS data, there are 50,845 vacant housing units in the County (ACS 2022).

Figure 3-8 through Figure 3-10 show the distribution and value density of residential, commercial, and industrial buildings in Cape May County. Value density is the dollar value of structures per unit area, including building content value. The densities are shown in units of \$1,000 per square mile. Such value distribution maps can assist communities in visualizing areas of high loss potential and in evaluating aspects of the study area in relation to the specific hazard risks.

3.8.2 New Development

Cape May County examined recent development over the last 5 years and anticipated new development in the next 5 years. Each jurisdiction was asked to provide a list by address of major development that has taken place within these timeframes. The location of new development projects was submitted via ArcGIS Survey123. An analysis was conducted in geographic information system (GIS) to determine hazard exposure of these development sites. Projects built on multiple parcels were assessed as one unit. If one parcel identified within the project boundary intersected a spatial hazard layer, the entire project was considered “exposed” to the hazard area of concern. Identifying these changes and integrating new development into the risk assessment provides communities information to consider when developing the mitigation strategy to reduce these vulnerabilities in the future.



Table 3-14. Building Stock Count and Replacement Cost Value by Occupancy Class

Jurisdiction	Residential		Commercial		Industrial		Other ^a	
	Building Count	Total Replacement Cost Value	Building Count	Total Replacement Cost Value	Building Count	Total Replacement Cost Value	Building Count	Total Replacement Cost Value
Avalon (B)	5,815	\$24,849,207,983	836	\$680,489,597	0	\$0	45	\$193,814,652
Cape May (C)	4,056	\$11,589,182,729	448	\$2,025,911,322	0	\$0	146	\$2,588,528,234
Cape May Point (B)	779	\$1,644,817,453	60	\$4,047,353	0	\$0	11	\$37,674,860
Dennis (Twp)	5,790	\$5,758,972,939	2,555	\$1,716,300,010	0	\$0	355	\$823,858,261
Lower (Twp)	18,696	\$18,209,164,200	6,256	\$2,623,428,461	0	\$0	435	\$1,943,244,237
Middle (Twp)	14,694	\$15,665,132,265	4,991	\$5,971,717,094	6	\$60,114,726	1,000	\$5,695,511,680
North Wildwood (C)	4,600	\$9,582,573,599	1,145	\$1,489,318,615	0	\$0	98	\$681,789,000
City of Ocean City (C)	17,824	\$40,309,707,322	1,253	\$2,184,509,827	1	\$364,375	157	\$2,154,495,942
Sea Isle City (C)	6,654	\$23,327,274,822	726	\$477,583,239	0	\$0	36	\$91,920,267
Stone Harbor (B)	3,806	\$7,869,433,946	373	\$257,324,954	0	\$0	23	\$50,256,256
Upper (Twp)	7,951	\$12,223,280,455	2,761	\$1,630,572,611	13	\$150,696,181	211	\$860,165,110
West Cape May (B)	1,377	\$2,424,493,766	344	\$192,873,857	0	\$0	39	\$276,074,109
West Wildwood (B)	785	\$1,031,659,743	123	\$18,877,982	0	\$0	12	\$14,250,615
Wildwood (C)	3,270	\$7,085,960,922	1,067	\$4,624,859,975	10	\$32,841,924	113	\$1,131,968,372
Wildwood Crest (B)	5,391	\$10,583,101,943	740	\$1,019,356,033	0	\$0	28	\$195,450,677
Woodbine (B)	1,642	\$1,217,399,639	211	\$212,181,370	7	\$83,647,623	247	\$1,736,225,260
Cape May County	103,130	\$193,371,363,726	23,889	\$25,129,352,299	37	\$327,664,830	2,956	\$18,475,227,532

Source: Cape May County 2024; RS Means 2024

a. Other = Government, Religion, Agricultural, and Education

Figure 3-8. Distribution of Residential Building Stock and Value Density in Cape May County

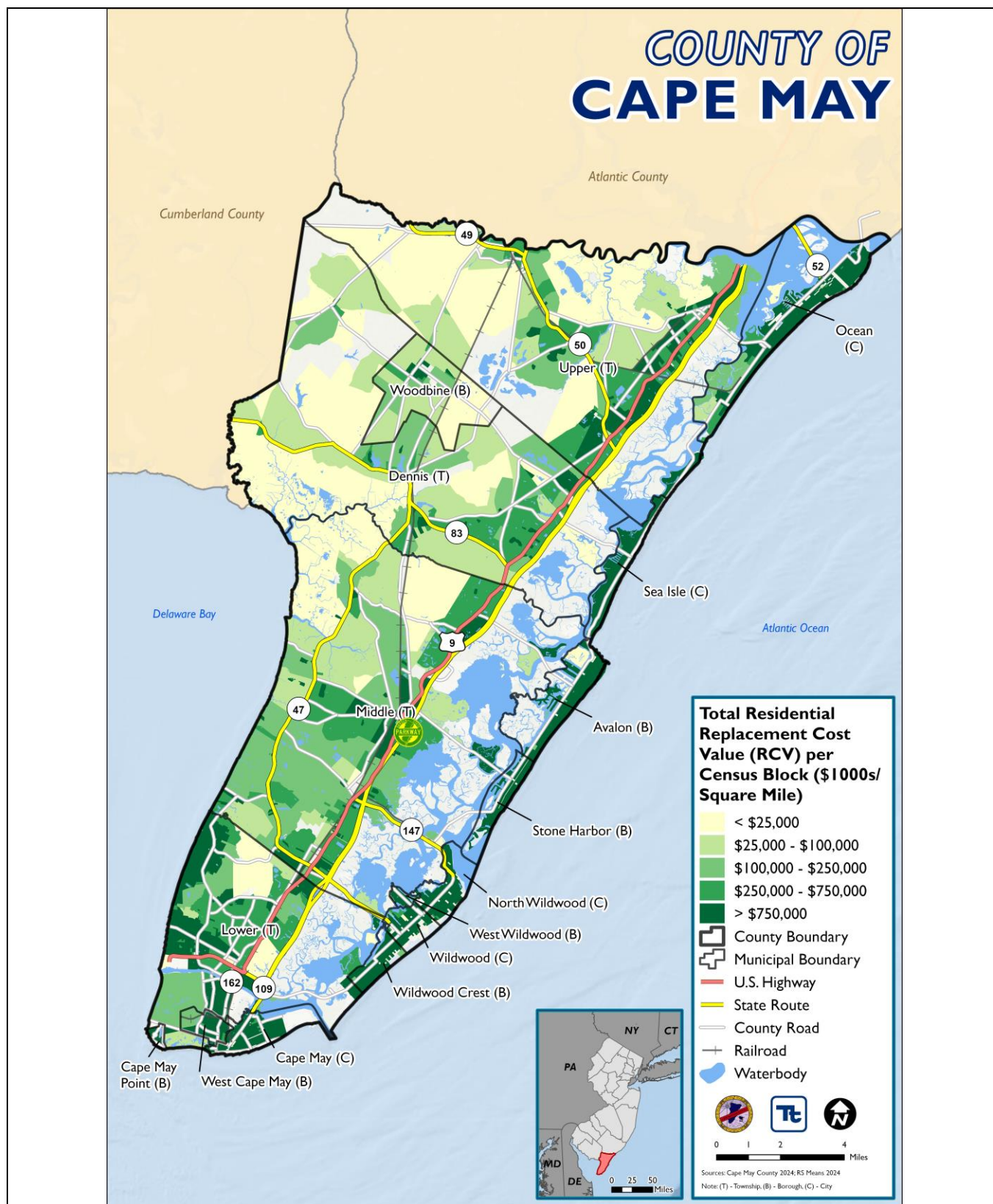


Figure 3-9. Distribution of Commercial Building Stock and Value Density in Cape May County

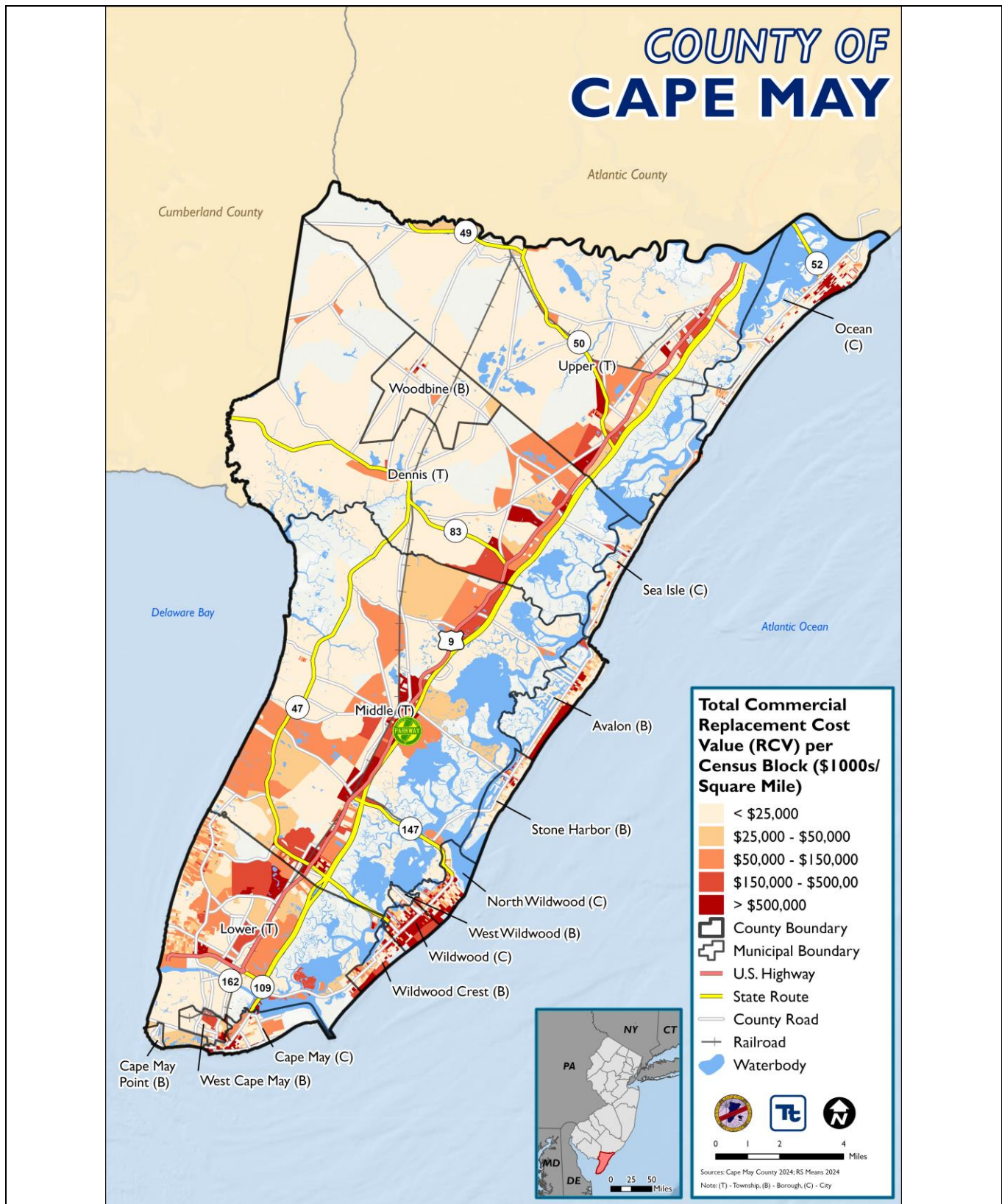
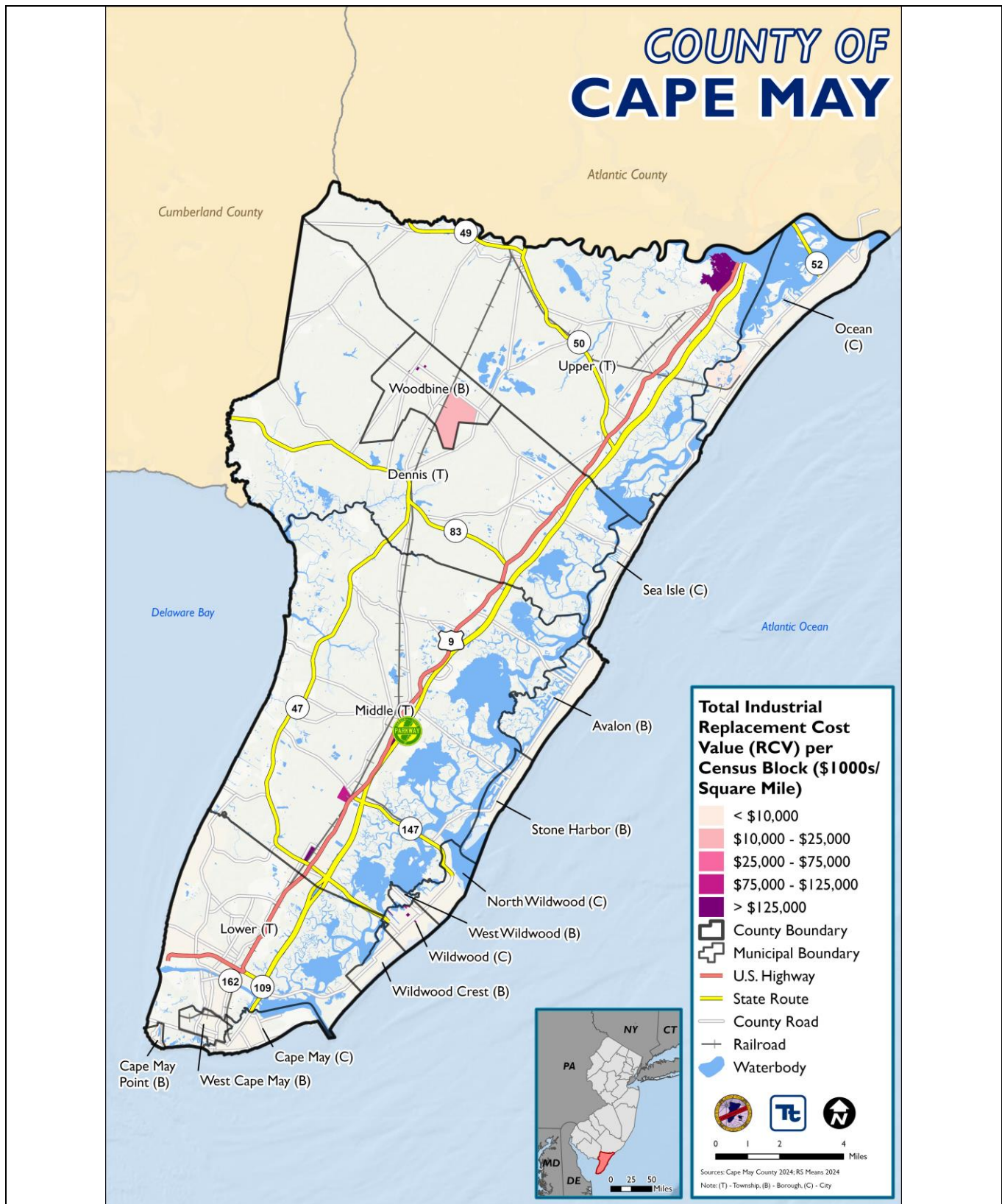


Figure 3-10. Distribution of Industrial Building Stock and Value Density in Cape May County



3.9 COMMUNITY LIFELINES

Facilities that are essential to the health and welfare of the population and that maintain essential and emergency functions are designated as critical facilities. These typically include police and fire stations, schools, emergency operations centers, and infrastructure such as roads, bridges and utilities that provide water, electricity, and communications. Facilities that use or store hazardous materials are designated as critical facilities as well. All of these facilities are especially important after any hazard event (FEMA 1997).

FEMA defines some types of critical facilities, as well as public services or activities, as “community lifelines.” Community lifelines provide the fundamental services in a community that, when stabilized, enable all other aspects of society. Following a disaster event, intervention is required to stabilize lifelines. FEMA defines eight categories of community lifelines as summarized in Table 3-15.

Table 3-15. FEMA-Defined Categories of Community Lifelines

Community Lifeline Category	Types of Facilities and Services Included
 Safety and security	Law enforcement/security, fire service, search and rescue, government service, community safety
 Food, hydration, shelter	Food, hydration, shelter, agriculture
 Health and medical	Medical care, public health, patient movement, medical supply chain, fatality management
 Energy	Power grid, fuel
 Communications	Infrastructure, responder communications, alerts warnings and messages, finance, 911 and dispatch
 Transportation	Highway/roadway/motor vehicle, mass transit, railway, aviation, maritime
 Hazardous materials	Facilities, hazmat, pollutants, contaminants
 Water systems	Potable water infrastructure, wastewater management



A comprehensive inventory of community lifelines in Cape May County was developed from various sources, including input from the Steering Committee and Planning Partnership. The following sections describe the inventory of community lifelines that was used for the risk assessment in this HMP. Although many lifeline facilities could fall within numerous categories, the lifeline facilities identified for this planning effort have been categorized according to their primary function.

3.9.1 Safety and Security

Table 3-16 lists safety and security community lifelines by facility type, and Figure 3-11 shows the location of these facilities in Cape May County. The sections below generally describe the assets in this category.

Table 3-16. Safety and Security Community Lifelines in Cape May County

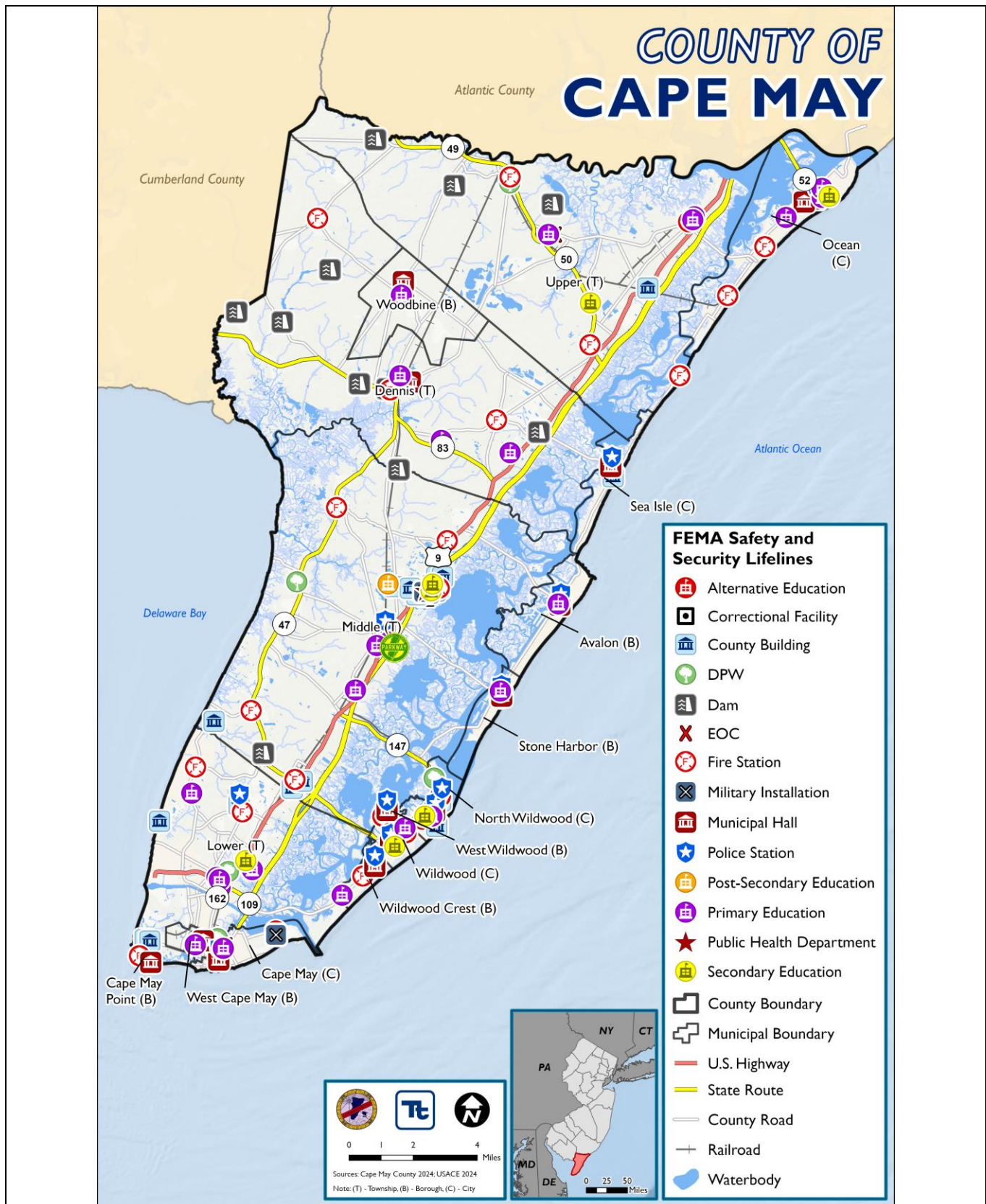
Type of Facility	Number of Facilities
Alternative Education	3
Correctional Facility	1
County Building	25
Dam	11
DPW	9
Emergency Operations Center	7
Fire Station	34
Military Installation	2
Municipal Hall	17
Police Station	12
Post-Secondary Education	1
Primary Education	27
Public Health Department	1
Secondary Education	9

Emergency Facilities

The Cape May County Department of Emergency Management oversees the emergency management activities of all County agencies and Cape May County's local jurisdictions. Each local jurisdiction has an emergency management coordinator with whom this department interacts and the coordinators, in turn, interact at the local level with police, fire, EMS, public works, public health, schools, among other entities.

The Cape May County Department of Emergency Management is responsible for aiding communities in emergency planning and response, as well as providing the training and equipment for the County's first responders and volunteers. The Department develops, maintains, and executes Cape May County's Emergency Operations Plan for disaster relief before, during, and after any type of natural or human-caused disaster.

Figure 3-11. Safety and Security Facilities in Cape May County





Dams

Table 3-17 lists the number of dams in Cape May County by hazard class, as identified in the U.S. Army Corps of Engineers (USACE) National Inventory of Dams. For more information on dams, refer to Chapter 6.

Table 3-17. Dams in Cape May County

Dam Hazard Classification ^a	Definition	Number of Dams in Cape May County
Class I	High-Hazard Potential—Failure of the dam may result in probable loss of life and/or extensive property damage	0
Class II	Significant-Hazard Potential—Failure of the dam may result in significant property damage; however, loss of life is not envisioned.	7
Class III	Low-Hazard Potential—Failure of the dam is not expected to result in loss of life and/or significant property damage.	4
Class IV	Small-Dam Low-Hazard Potential—Failure of the dam is not expected to result in loss of life or significant property damage.	0
Total		11

Source: USACE 2024

a. Class definitions per NJDEP

Military Installations

Cape May County is a designated Coast Guard Community, a federal designation that recognizes the County's relationship with the United States Coast Guard. Cape May is home to Training Center Cape May, which is the only Coast Guard recruit training center in the country. Approximately 2,400 recruits graduate annually, and 80 percent of the Coast Guard's workforce begins their enlisted careers in Cape May. The center is located at the eastern end of Sewell Point in Cape May between the ocean and Cape May Harbor. The Center provides approximately 1,200 year-round jobs. Additionally, the Coast Guard operates a uniform distribution center in Woodbine and a station house in Ocean City. The Coast Guard also maintains a seasonal recreation facility at Townsend's Inlet in Sea Isle City and continues to own the former LORAN facility at Diamond Beach in Lower Township. Each facility is in the Special Flood Hazard Area and is vulnerable to flooding.

Schools

Schools ranging from elementary to post-secondary education serve the County. During an emergency event, some of these facilities function as shelters.

Government Buildings

Government buildings – specifically those operated by County and municipal governments – are invaluable lifelines during hazard events. These include both municipal office buildings as well as facilities owned and operated by the County government and municipal governments that support various functions, including public works, administration, public safety, and recreation.

3.9.2 Food, Hydration, Shelter

Table 3-18 lists food, hydration, and shelter community lifelines by facility type, and Figure 3-12 shows the location of these facilities in Cape May County.

Figure 3-12. Food, Hydration, and Shelter Facilities in Cape May County

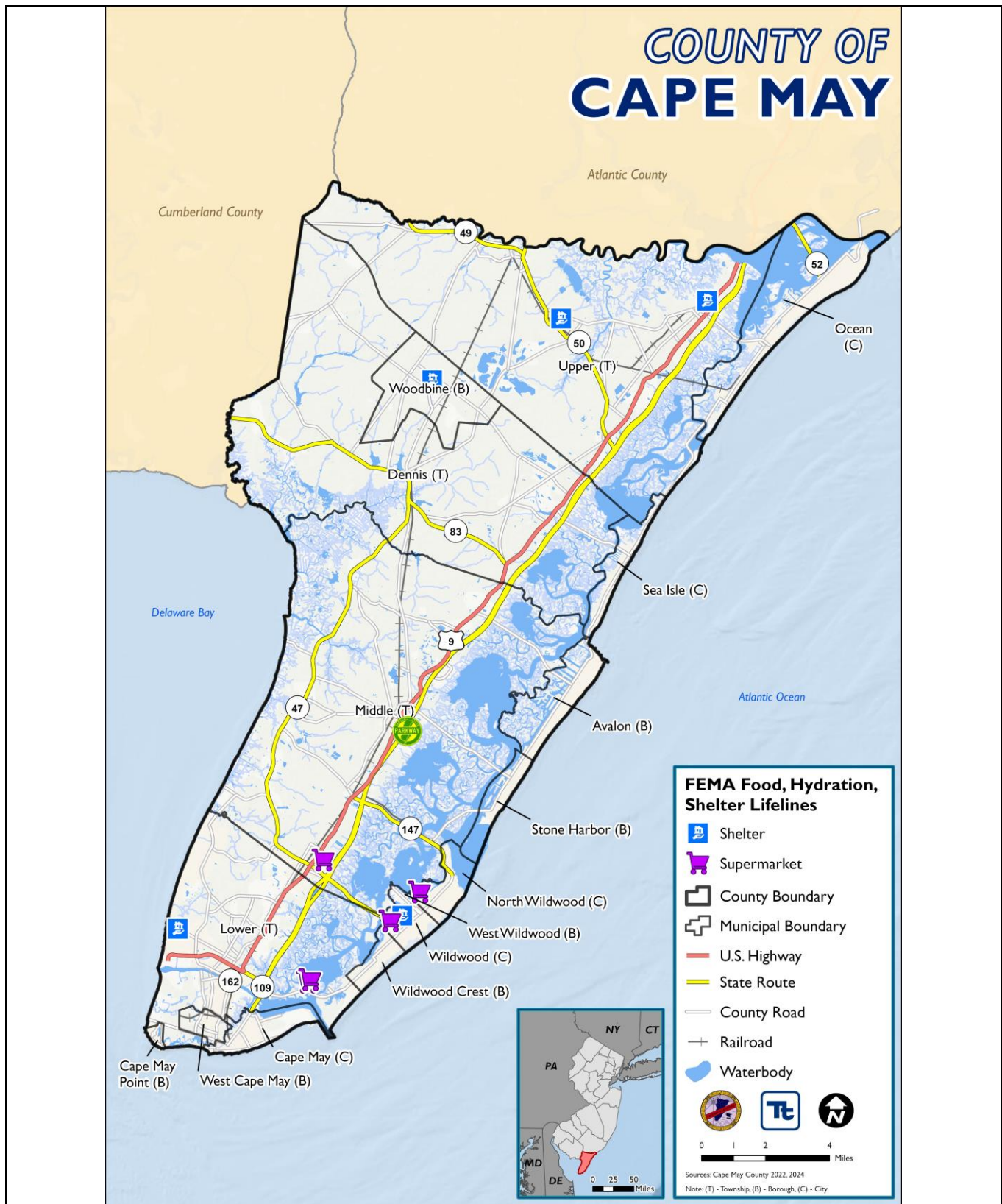




Table 3-18. Food, Hydration, Shelter Community Lifelines in Cape May County

Type of Facility	Number of Facilities
Shelter	5
Supermarket	5

The county assists in maintaining a number of shelters. One shelter is fully supported by the American Red Cross, two are partially supported by the American Red Cross and two are not supported by the American Red Cross.

3.9.3 Health and Medical

Table 3-19 lists health and medical community lifelines by facility type, and Figure 3-13 displays the location of these facilities in Cape May County.

Table 3-19. Health and Medical Community Lifelines in Cape May County

Type of Facility	Number of Facilities
EMS	14
Hospital	1
Medical Center	1
Pharmacy	31
Senior Care	17
Urgent Care	3
Veterinary Hospital	3

There is one major hospital in Cape May County. Cape Regional Medical Center is in Middle Township and is an acute-care medical center that provides a variety of inpatient and outpatient services.

3.9.4 Energy

Table 3-20 lists energy community lifelines by facility type, and Figure 3-14 displays the location of these facilities in Cape May County.

Table 3-20. Energy Community Lifelines in Cape May County

Type of Facility	Number of Facilities
Electric Substation	4

The primary energy provider in the County is Atlantic City Electric. Energy services are also provided by South Jersey Gas. The County identified one electric generating facility as critical. Beesley's Point in Upper Township is home to a decommissioned coal plant that may be re-purposed for future energy uses.

Figure 3-13. Health and Medical Facilities in Cape May County

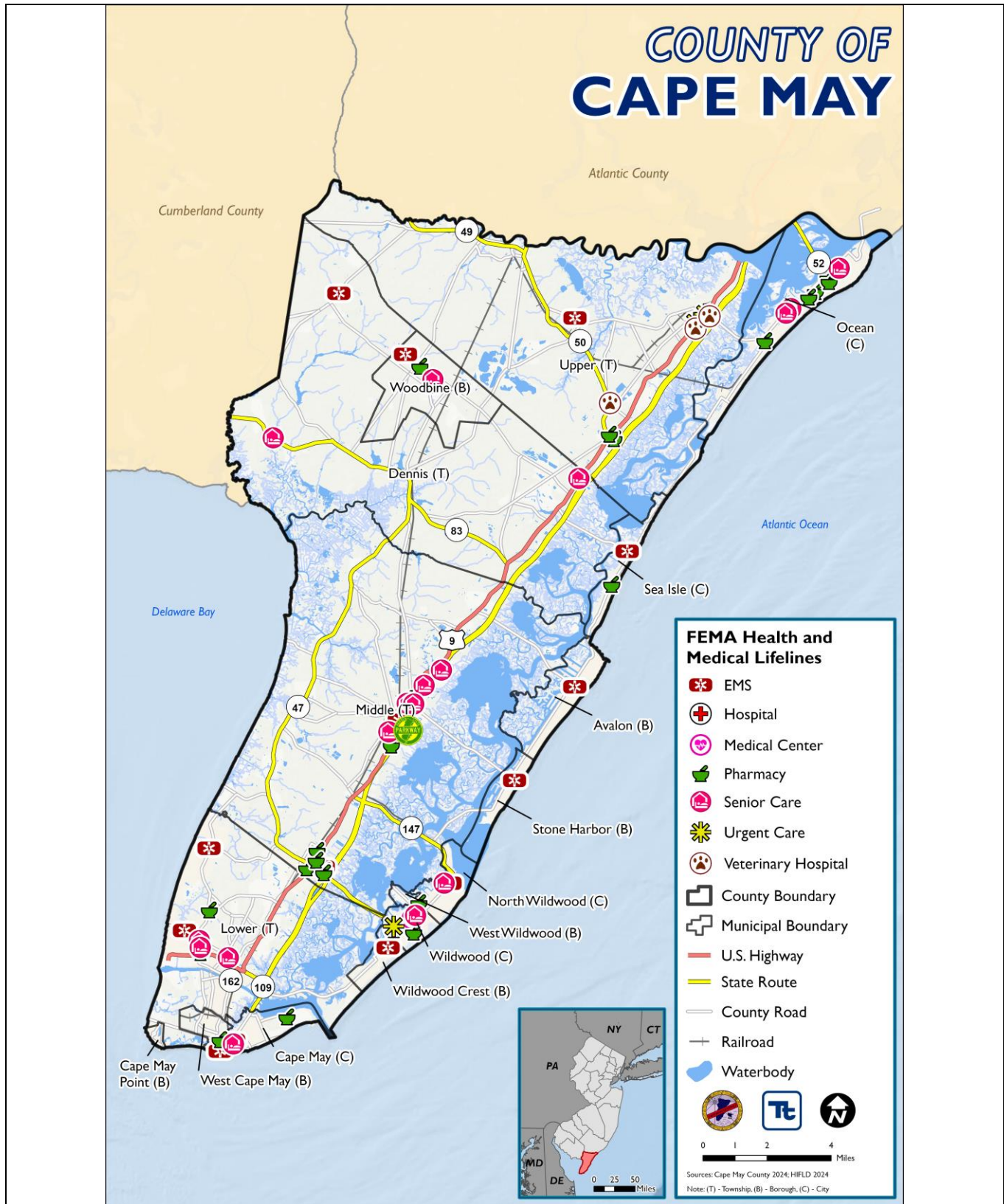
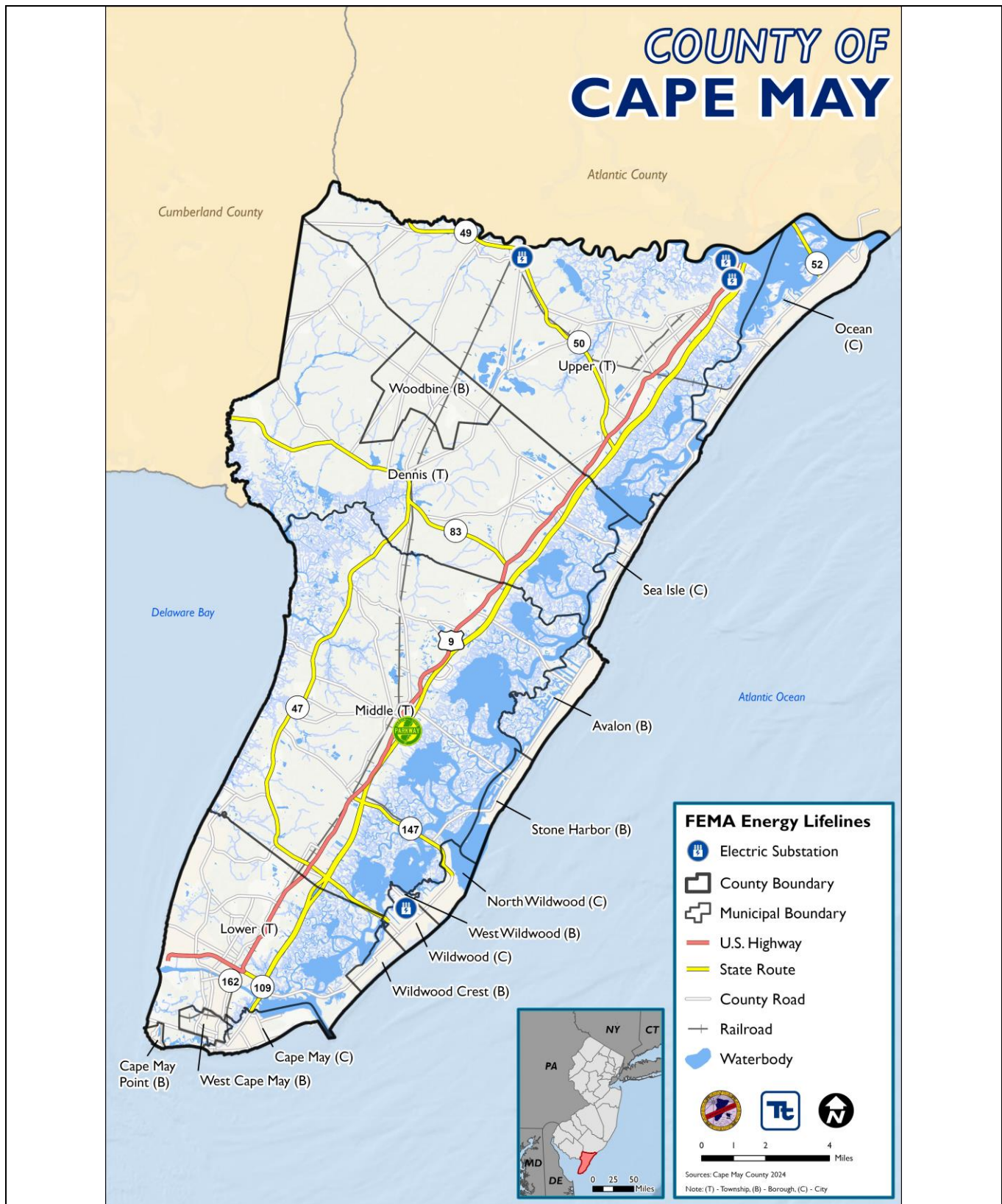


Figure 3-14. Energy Facilities in Cape May County





3.9.5 Communications

Table 3-21 lists the communications community lifelines by facility type, and Figure 3-15 displays the location of communications facilities in Cape May County.

Table 3-21. Communications Community Lifelines in Cape May County

Type of Facility	Number of Facilities
Communications Tower	63
Communications Facility	5

There are 67 communication facilities located in Cape May County. AT&T, Verizon, and T-Mobile each provide nearly complete 4G LTE coverage throughout the County. Significant portions of the County receive 5G service through T-Mobile and AT&T. However, significant gaps remain in coverage, and areas such as Cape May Courthouse, Burleigh, portions of Cape Island, Rio Grande, Wildwood, Dennis, and Upper Township remain uncovered.

The Federal Communications Commission reports that there are 53 structures in its Antenna Structure Registration. Many of these structures are located along the Route 9/Garden State Parkway corridor and are owned by a variety of entities, including utility companies, local governments, and communication firms.

3.9.6 Transportation

Table 3-22 lists the transportation community lifelines by facility type, and Figure 3-16 displays the location of communications facilities in Cape May County.

Table 3-22. Transportation Community Lifelines in Cape May County

Type of Facility	Number of Facilities
Airport	4
Bridge	36
Bus Station	1
Ferry	1
Train Station	1

From north to south, lying along an axis formed by US Route 9 and the Garden State Parkway, the County is approximately 27 miles long. At its widest point (an east-west line through Eldora), the County measures approximately 15 miles.

Cape May County consists of a chain of developed barrier islands connected to the mainland by a series of causeways. The causeways tie into the north/south Route 9/Garden State Parkway corridor that links the County to the northern part of the State. The Garden State Parkway was opened in 1956 and has served as the major transportation link to and within Cape May County. It passes through the length of the County, from the Great Egg Toll Plaza heading 29 miles south to its terminus at Exit 0.

The “northern bay shore” or western part of the County is mostly rural/agricultural land with limited public water or sewer and is less densely developed. It is served by NJ State Route 47.

Figure 3-15. Communications Facilities in Cape May County

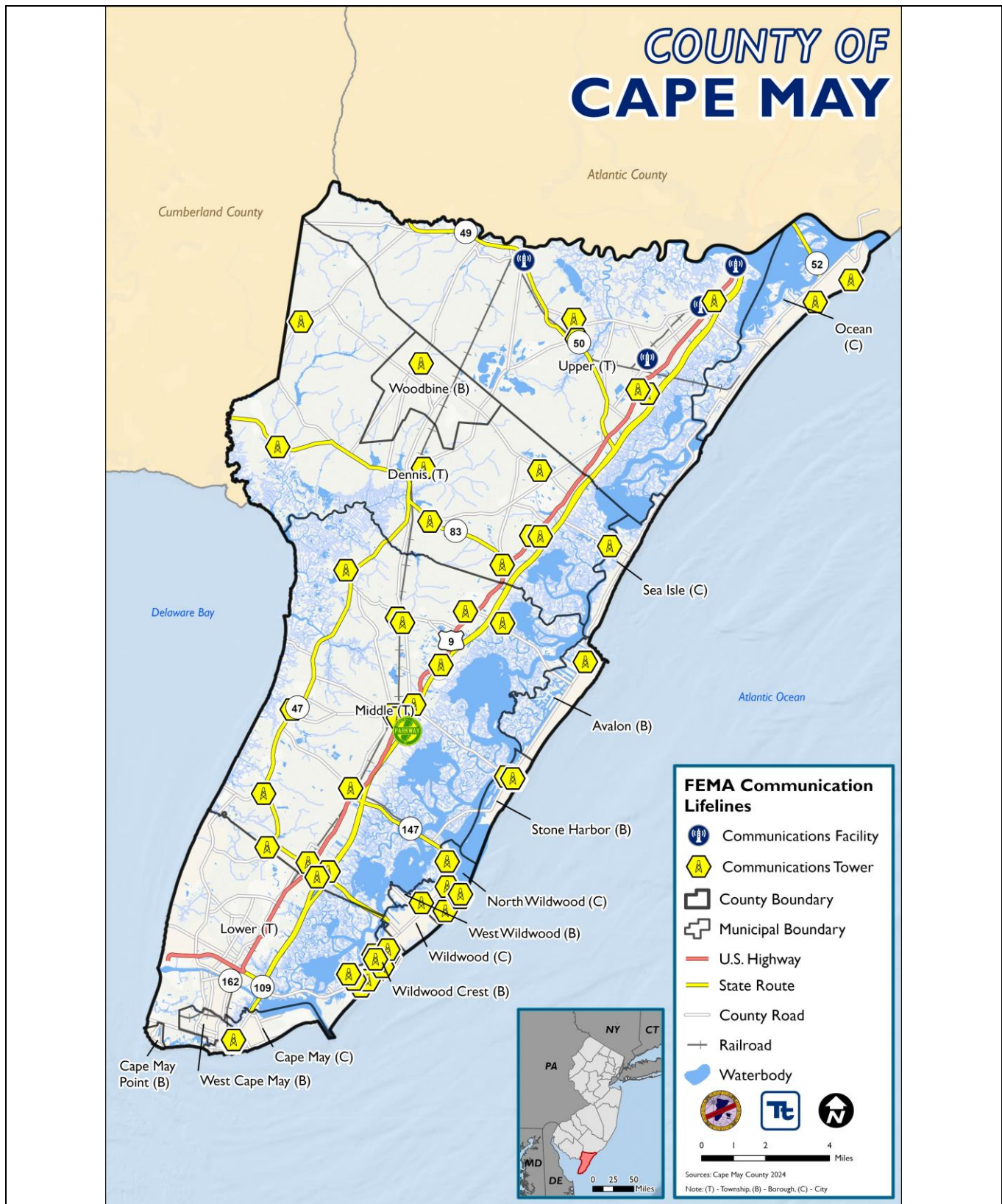
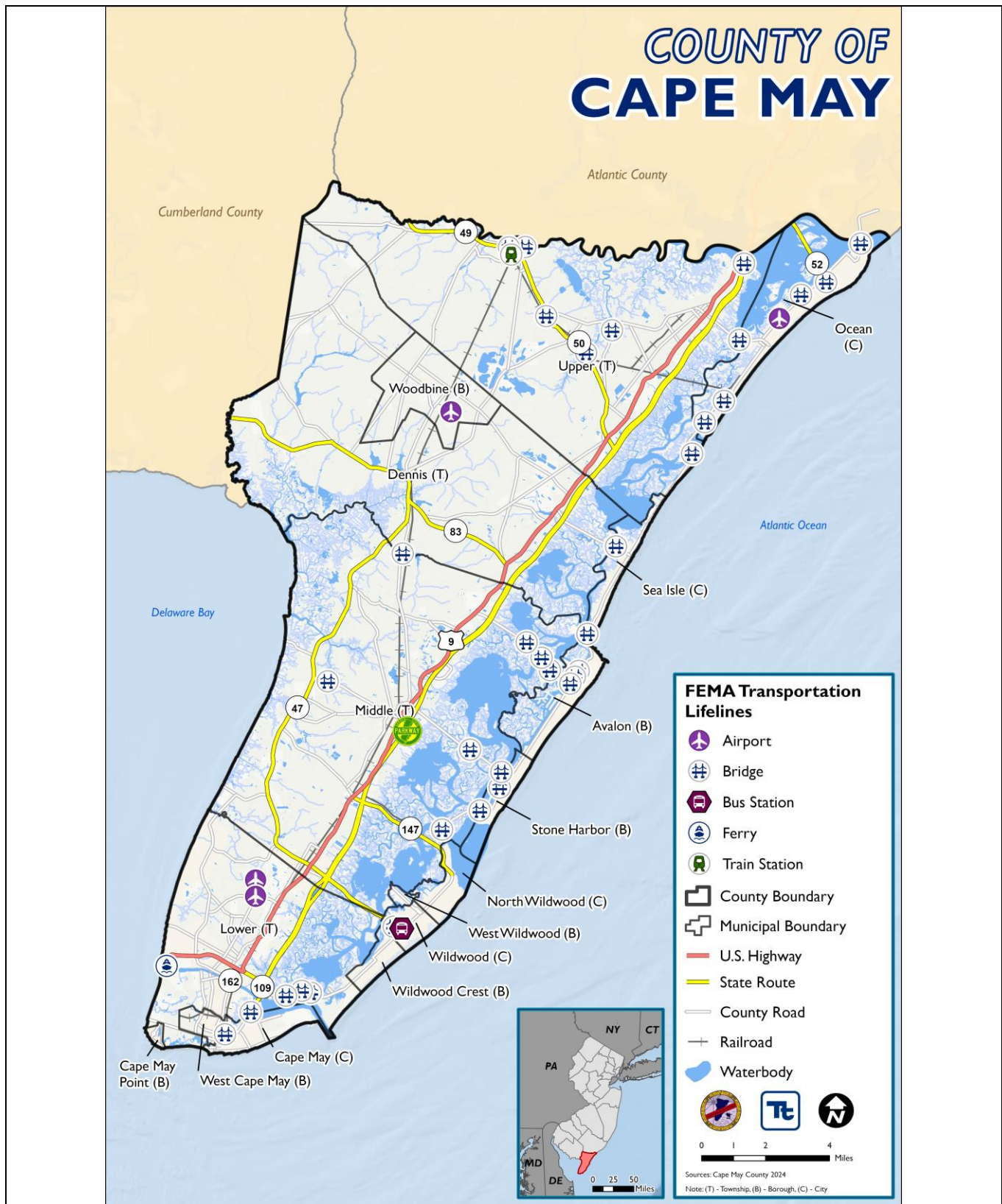


Figure 3-16. Transportation Facilities in Cape May County





Transportation access out of the County is limited to road crossings from the Garden State Parkway at the Great Egg Toll Plaza, Route 52 (from Ocean City), Route 49 (Route 50, Route 550, and Route 557 connections) and Route 347. These limited road connections strongly affect evacuation routes and evacuation times together with road flooding hazards during major storms. According to County-provided data, there are 224 miles of evacuation routes throughout Cape May County.

One of the most significant negative impacts of tourism in Cape May County is traffic congestion. The heavy reliance on the automobile and lack of adequate mass transportation in the region has contributed to increasing congestion. Parkway traffic has increased in pace with the overall development of the County.

Bus and Other Transit Facilities

Bus transportation in Cape May County is provided by three entities: New Jersey Transit, which provides service from Philadelphia/Camden via Sicklerville/Atlantic City to Sea Isle, Avalon, Stone Harbor, Wildwood and Cape May; the Five Mile Beach Electric Railway (a private operator) which operates public passenger service serving the Wildwoods, Cape May City, the Wildwoods and Ocean City; and a Fare Free Transportation system operated by the County (Cape May County 2016).

Rail

There are two active rail lines within Cape May County: a freight line that provides coal and fuel oil to the electric generating station in Beesley's Point (Upper Township) and a tourist/passenger rail service between the Cape May County Zoo, Cold Spring Village, and the City of Cape May. Passenger rail is operated by the Cape May Seashore Lines Railroad. There is also a seasonal excursion train between Tuckahoe Station and Richland (Cape May County 2016).

Airports

Air travel within the County is facilitated by three airports: the Cape May Airport located in Erma, in the north-central part of Lower Township, the Ocean City Municipal Airport, and the Woodbine Municipal Airport. The Atlantic City International Airport, located approximately 20 miles north of Cape May County, services larger commercial aircraft for business as well as private travel (Cape May County 2016).

Ferry

The Cape May—Lewes (Delaware) Ferry, owned and operated by the Delaware River and Bay Authority, is the major water transportation facility serving Cape May County. A fleet of five vessels capable of carrying approximately one hundred cars and 800 passengers each make Delaware Bay crossings year-round. Terminals are located at the west end of the Cape May Canal and at Breakwater Harbor, Lewes, Delaware (Cape May County 2016).

3.9.7 Hazardous Materials

Table 3-23 lists the hazardous material community lifelines by facility type, and Figure 3-17 displays the location of communications facilities in Cape May County.

Figure 3-17. Hazardous Materials Lifelines Identified in Cape May County

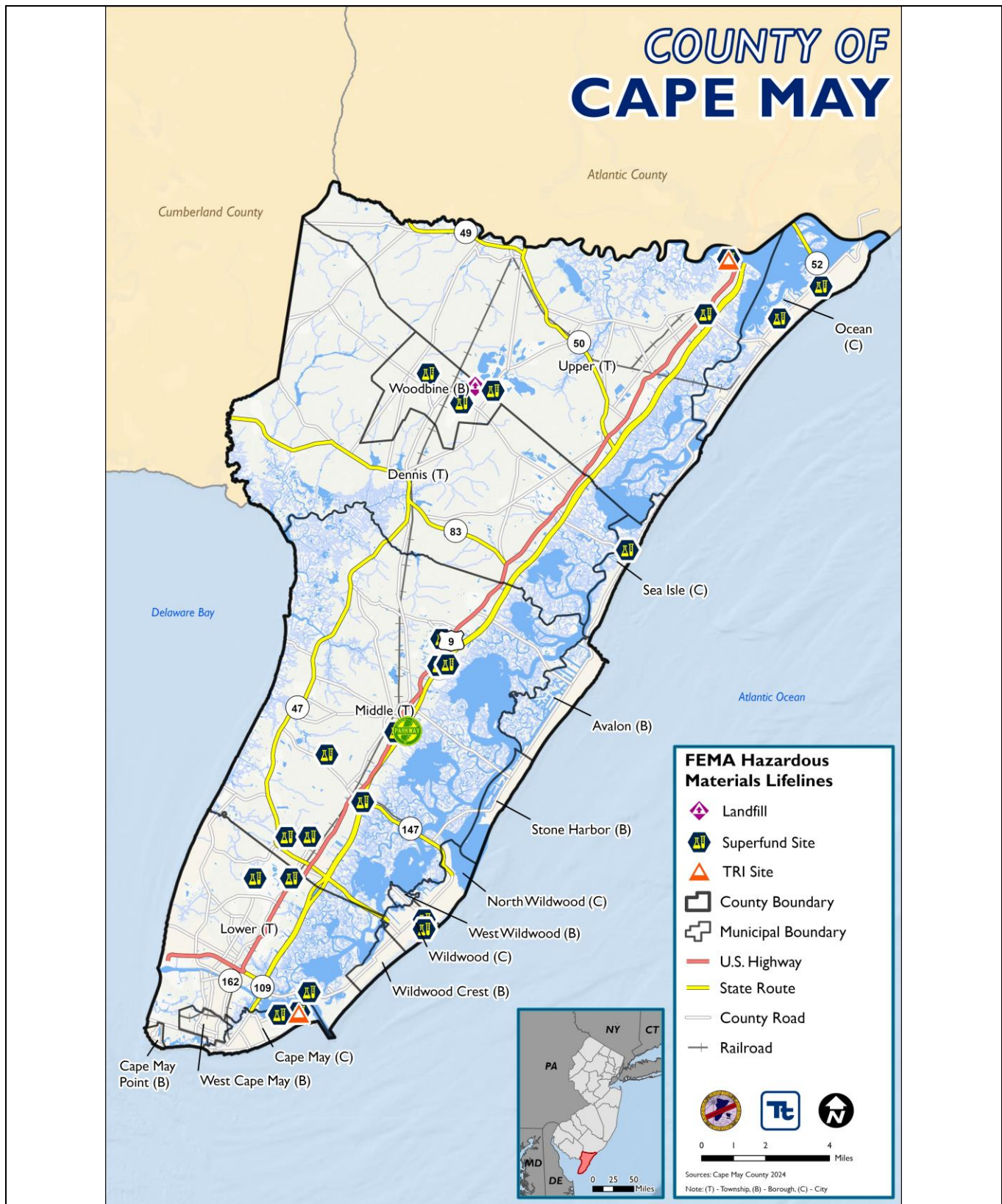




Table 3-23. Hazardous Materials Community Lifelines in Cape May County

Type of Facility	Number of Facilities
Landfill	1
Superfund Site	24
TRI Site	2

Hazardous Materials Facilities

The U.S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) (Superfund) Public Access Database reports that there are currently no Superfund sites in Cape May County. Superfund sites are polluted locations requiring a long-term response to clean up hazardous material contaminations.

Abandoned hazardous waste sites placed on the federal National Priorities List (NPL) include those that the EPA has determined present “a significant risk to human health or the environment,” with the sites being eligible for remediation under the Superfund Trust Fund Program. As of 2025, Cape May County hosts one hazardous site in the federal Superfund Program that is listed on the NPL: the Williams Property in the unincorporated community of Swainton (CERCLIS 2025).

The CERCLIS database reports that there are currently eighteen archived Superfund sites located in Cape May County (CERCLIS 2025). An archived Superfund site is one that has no further interest under the Federal Superfund Program based on available information and is no longer part of the CERCLIS inventory. Archived and active Superfund sites are accessible through the same database but are differentiated by status.

3.9.8 Water Systems

Table 3-24 lists the water system community lifelines by facility type, and Figure 3-18 displays the location of communications facilities in Cape May County.

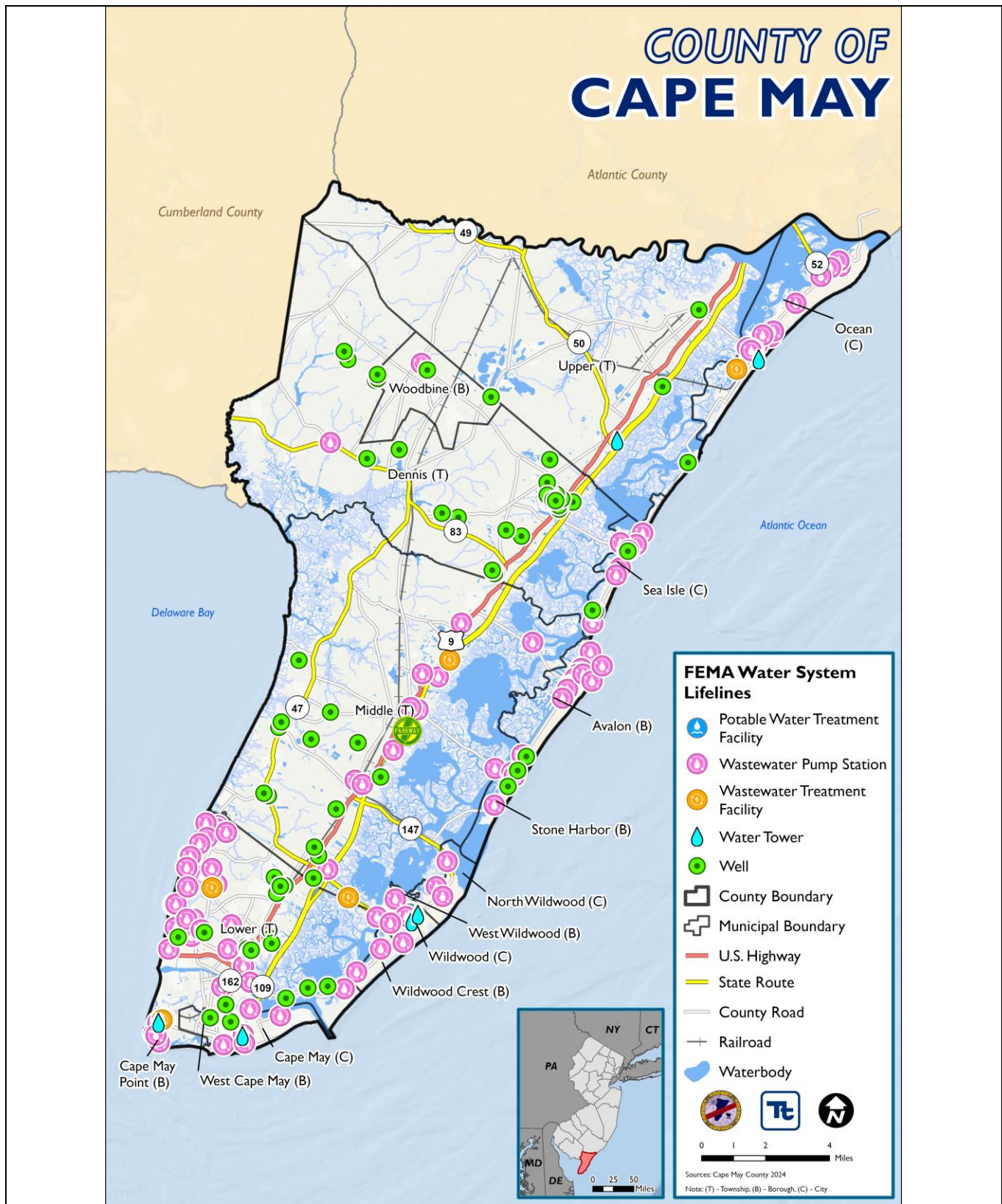
Table 3-24. Water System Community Lifelines in Cape May County

Type of Facility	Number of Facilities
Potable Water Treatment Facility	2
Wastewater Pump Station	99
Wastewater Treatment Facility	6
Water Tower	7
Well	75

Potable Water

Cape May County’s water supply is derived from groundwater sources. There are no surface water supplies in the County, owing significantly to the extent of water withdrawal, saltwater intrusion, and the County’s coastal geology. As of 2019, there are up to 170 municipal water supply wells and 21,500 domestic wells. The principal source of water is the Atlantic City 800-foot sand section of the Kirkwood Formation, which is largely protected from surface contamination. Reliance on this aquifer has caused water levels to decline and has brought brackish water into wells in Cape May County (USGS 2001). Water withdrawal varies throughout the season.

Figure 3-18. Water Systems Lifelines Identified in Cape May County





The communities of Cape May County derive water from various interconnected sources. For example, Ocean City's water derives from wells located on the island itself, Wildwood's water service (which also serves West Wildwood, Rio Grande in Middle Township, North Wildwood, and Wildwood Crest) is drawn from wells in Middle and Lower Townships from various aquifers. Cape Island's water supply derives from five wells in the Kirkwood-Cohansey and Atlantic City aquifer system and is then treated in a reverse osmosis water treatment plant. Dennis Township has no community water system, whereas other inland communities have a relatively small number of wells drawing water from various sources.

Wastewater Facilities

According to the Cape May Water Quality Management Plan/Wastewater Management Plan (2007), there are five main wastewater treatment plants. Four of which are owned and operated by the Cape May County Municipal Utilities Authority, and one by the Lower Township Municipal Utilities Authority. The Dennis Township – Woodbine region is the only one without a regional wastewater treatment plant, while the Wildwood – Lower Township region has two facilities.

3.9.9 Other Critical facilities

Some facilities that are identified as critical for hazard mitigation in Cape May County do not fit in any of FEMA's community lifeline categories. These include senior centers, libraries, marinas, polling sites, and places of worship, as shown in Table 3-25. Figure 3-19 shows the location in Cape May County of these other critical facilities.

Table 3-25. Additional Community Lifelines in Cape May County

Type of Facility	Number of Facilities
Library	11
Marina	56
Place of Worship	82
Polling Site	50
Senior Center	5

3.9.10 Critical Facilities by Jurisdiction

Table 3-26 lists all community lifelines and other critical facilities identified in the asset inventory for this HMP by category and jurisdiction.

Figure 3-19. Other Critical Facilities in Cape May County

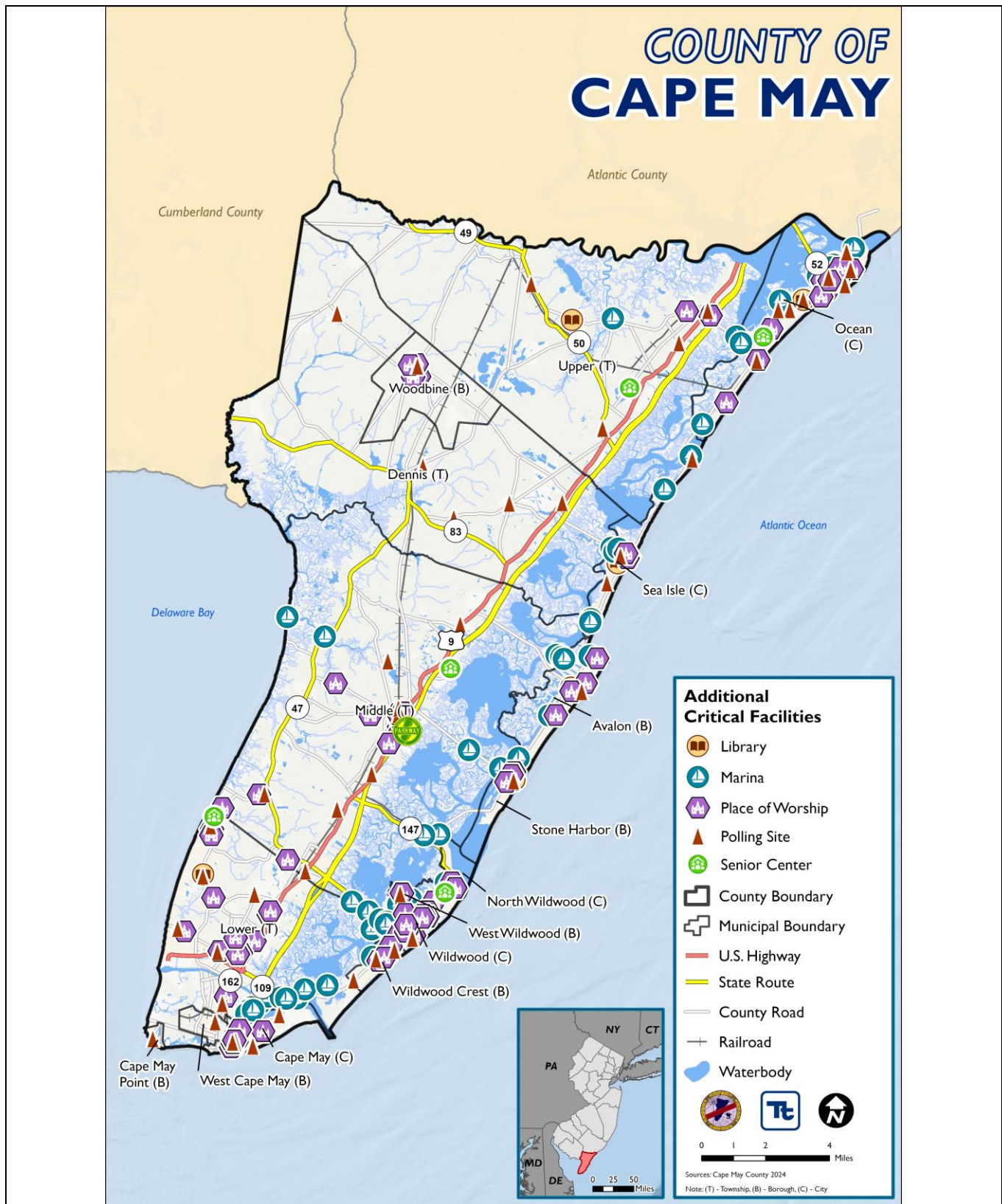




Table 3-26. Distribution of Community Lifelines and Other Critical Facilities by Jurisdiction

Jurisdiction	Number of Facilities in Jurisdiction									
	Communications	Energy	Food, Hydration, Shelter	Hazardous Materials	Health & Medical	Safety & Security	Transportation	Water Systems	Other Critical Facilities	Total
Avalon (B)	1	0	0	0	1	6	3	12	9	32
Cape May (C)	2	0	0	3	4	9	0	10	14	42
Cape May Point (B)	0	0	0	0	0	4	0	5	1	10
Dennis (T)	9	0	0	0	3	13	2	24	7	58
Lower (T)	0	0	3	3	7	14	7	51	37	122
Middle (T)	19	0	1	8	18	41	9	28	30	154
North Wildwood (C)	6	0	1	0	3	13	0	4	8	35
Ocean (C)	2	0	0	3	8	11	6	16	31	77
Sea Isle (C)	0	0	0	1	2	5	1	11	9	29
Stone Harbor (B)	5	0	0	0	1	5	1	7	7	26
Upper (T)	9	3	2	4	10	16	10	4	14	72
West Cape May (B)	0	0	0	0	1	3	1	1	1	7
West Wildwood (B)	0	0	0	0	0	3	0	1	6	10
Wildwood (C)	0	1	2	2	7	10	2	6	15	45
Wildwood Crest (B)	14	0	0	0	1	4	0	2	8	29
Woodbine (B)	1	0	1	3	4	4	1	7	7	28
Cape May County (Total)	68	4	10	27	70	161	43	189	204	776